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THE IMPACT OF TEACHERS' PERCEPTIONS OF STUDENTS WITH HIGH  
FUNCTIONING AUTISM ON THE STUDENT'S LEARNING ENVIRONMENT

By

Corleigh Donati

BS (Boston University) 2003

MSW (Simmons College) 2006

A DISSERTATION

Presented to the Faculty of

The College of Graduate and Professional Studies at the

University of New England

In Partial Fulfillment of Requirements

For the degree of Doctor of Education

Portland & Biddeford, Maine

March 3, 2017

THE IMPACT OF TEACHERS' PERCEPTIONS OF STUDENTS WITH HIGH  
FUNCTIONING AUTISM ON THE STUDENT'S LEARNING ENVIRONMENT

Abstract

This qualitative research study examines, explores, and describes teachers' perceptions towards high functioning autistic (ASD) students and its impact on the student's learning environment in suburban elementary school inclusion classrooms. Significant themes and subthemes emerged while analyzing the data. The emergent themes categorized were 1) enriching experiences, 2) classroom challenges, 3) preparedness and knowledge, 4) accommodations, and 5) needed supports. Based on the data I concluded that teachers perceived students with ASD to positively impact the learning environment their classroom.

Participants reported that ASD students are challenging to work with due to their disruptive behaviors and lower level of functioning, which impacts the student's academic capabilities. Shifts in teaching strategies and lesson plans were reported in order to best address the student's ASD diagnosis. Participants also reported a lack of training and feeling underprepared on how to best meet the academic and social needs of ASD students.

Recommendation for school systems and educators based on the findings are for schools districts to ensure the proper training programs for teachers surround ASD; implement better systems for utilizing a team approach when working with ASD students; and implement policy change surrounding teacher schedules when teaching a class with an ASD student in it.

University of New England

Doctor of Education  
Educational Leadership

This dissertation was presented  
by

Corleigh Donati

It was presented on  
January 6th, 2017  
and approved by:

Steven Moskowitz, Ed.D  
Lead Advisor  
University of New England

Tarae Waddell-Terry, Ed.D  
Secondary Advisor  
University of New England

Nathalie Saltikoff, Ph.D  
Affiliate Committee Member  
Endicott College

## ACKNOWLEDGEMENTS

Cameron, I am your biggest FAN and am forever grateful to be your mother. Thank you for teaching me more in ten years than I will ever be able to teach you in my lifetime. Your daily strength, courage, determination, and joy ground me, inspire me, and provide me with insight into the world that I cannot gain anywhere else. You are ALWAYS asking questions and exploring the world around you with passion, happiness, and laughter. I used your constantly inquisitive mind and sense of wonder as my fuel and motivation. I love you and everything that makes you who you are. Keep on being who you are, always!

Dino, thank you for always believing in me and being there for me. You are truly the best partner I could ever ask for. I honestly could not have made it through the past three years without your unconditional love and continuous support. You are the best husband anyone could ever ask for. You are my rock, my grounding force. Thank you for believing in me when I didn't have the energy to believe in myself. Thank you for pushing me when I couldn't push anymore. Thank you for listening to me even when you didn't understand what I was talking about. Most importantly, thank you for constantly supporting me through this long ass journey. I am forever grateful to you and for your unconditional support, love, and guidance. I love you forever and always. You are truly the best!

My family: a huge thank you to you all. You are the quirkiest, funniest, and most loving group of people that I have ever met. I am truly honored to call you my family. Your support, love, and guidance have always been a constant. A constant that gave me the courage to do things I didn't think were possible. A constant that helped me feel confident enough to break outside of my comfort zone. A constant that helped ground me. A constant that provided me with the support I needed so I could believe in myself in order to make my dream a reality. I

honestly could not have done this without each one of you. I love you all so much! A very special thank you to my mom and dad for funding this crazy ride.

Thank you to my Iron Village family and the two best coaches anyone could ask for. You all were my sanity! The village was my grounding and happy place. A very special place that allowed me to escape the realities of my stress. Thanks for pushing me every week, putting up with my shenanigans, always making me laugh, accepting me for who I am weirdness and all, and checking in on me. I had a goal of being the strongest I have ever been in my life when I graduated. Thanks to all of you, especially Doug and Ryan, I have surpassed that goal. I am stronger inside and out because of all of you.

Thank you to my cohort members, Team Awesome, and especially Susan. I honestly could not have survived this program without our continuous and incredibly long e-mail threads, hours of online meetings, text messages, and inspirational cat memes. It was always comforting knowing that there were others going through the same challenging and daunting experience as me. Even though we have never met in person, your collective drive, focus, and determination fueled me on days when I didn't think I could go any further.

Thank you to all of my professors and everyone else at the UNE Educational Leadership program. Without your leadership, guidance, and support this would not have been possible. Thank you for all of your direction, expertise, and dedication.

A gigantic thank you to my editing superhero KC for your fantastic and brilliant editing skills, since without you I am not sure this document would make any sense!

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# **CHAPTER 1**

## **INTRODUCTION**

According to the Center for Disease Control's (CDC) Autism and Developmental Disabilities Monitoring (ADDM) Network, roughly 1.47% (1 in 68) of children have been identified as having an Autism Spectrum Disorder (ASD) (Baio, 2014). In 2014, my son became one of those children. At the age of 6, he was diagnosed with high functioning autism. Does his diagnosis define him? Certainly not, but it does impact how he maneuvers throughout the world and how others interact with and viewed him at times. My son's transition into kindergarten was one of those times where other people's interactions with him impacted him socially, emotionally, and academically.

When my son began kindergarten, he was excited. He could not wait to learn at the "big kid" school. Shortly after the school year started, it became apparent that his teacher had a difficult time understanding him. For example, his teacher stated that she would become frustrated with him when he would not look at her during class instructions. She would also try to force him to interact socially with other children. Most of her attempts were unsuccessful, and ended in frustration for both her and my son. Overall, it seemed as if she just did not understand the challenges my son was facing and that she felt he was difficult and even annoying to work with. The whole school experience went from exciting to extremely stressful. There were tears every morning at drop-off. After many attempts to work with the teacher and the school system, my husband and I decided to switch him to a private school.

After starting at his new school, the change in my son's feelings towards school was almost instantaneous. His new teacher understood how to implement teaching strategies that supported him both socially and academically. Over time, my son started to love attending

school again. He started to love learning again. He slowly began to interact with the other children in his class. This left me wondering about the role a teacher's perception might play in a child's ability to learn in the classroom. Are there specific policy changes that need to occur surrounding training to provide the best teaching practices for children with high functioning autism? I started to think about what leadership, training, and policies could have been in place to help my son and other children like him. This experience was the spark that started my research journey, since in many ways, my son is no different than the hundreds of thousands of other children also diagnosed with autism.

### **Importance of the Study**

Autism is a neurological developmental disability that causes impairments in an individual's social and communication skills. Symptoms typically occur before the age of 5, including restricted, repetitive, and stereotyped behaviors (Leekam, Prior, & Uljarevic, 2011). Since the 1990s, an increase in public concern has occurred surrounding the alarming increase in autism diagnosis rates (Volker & Lopata, 2008). Autism is a neurological disorder that impacts 1 in 68 children. It is more prevalent in boys than girls, affecting approximately 3.29% of boys versus 1.15% of girls (Baio, 2014; Black et al., 2015). According to the CDC (2014) from 2013 to 2014, there was a reported 2.24% increase in autism diagnoses rates among children. This increase in autism diagnosis rates has become a growing concern among parents, educators, medical professionals, and mental health workers (Volker & Lopata, 2008).

Since rates of autism have been steadily increasing over the years, children with high functioning autism are then typically being placed in inclusion classrooms within the general educational setting. Research has shown that 33.4% of all children with autism are diagnosed with high functioning autism and are therefore typically placed in general education classroom



settings (U.S. Department of Education, 2015). From 1992-2012, there has been an average increase of 800% nationwide in students with autism within the general education school systems (Crosland & Dunlap, 2012). Some of these students are assigned an aide to assist them with day-to-day classroom activities, while others may slip through the cracks when little-to-no services are provided by the school district, thus placing the burden of making accommodations solely on the teacher.

The increase in students with autism in today's classrooms can bring upon many challenges for traditional teaching and learning methods. A teacher's thoughts, feelings, perceptions, and understanding of the student's diagnosis and needs are crucial in assisting the learning process of students within the classroom. Research shows that successful inclusion and positive teacher attitudes towards inclusion are dependent on factors such as a teacher's experience, training, perceptions of resources, and access to support (Rodrigues, Saldana, & Moreno, 2012). Inclusion classrooms have become more commonplace in schools, but 50% percent of teachers report feeling they are inadequately trained and prepared to work with students with autism (Chamberlin, Kasari, & Rotheram, 2003; Dahle, 2003; Crosland & Dunlap, 2012; Sansosti & Sansosti, 2012). This lack of training could pose many challenges for both teachers and the students. These challenges could have a dramatic impact on a teacher's perceptions of the academic learning potential of students with autism.

This study seeks to explore the role a teacher's perceptions play when working with autistic students, as it relates to teaching strategies, training, and academic outcomes. Does a teacher perceive students with autism to be more difficult, challenging, or weird, less intelligent, or harder to work with than typically developing students? Or does the teacher view them as gifted, unique, intelligent, easy to work with, or possessing special talents? What are the

teacher's belief systems surrounding autism? This study will also explore whether these perceptions, positive or negative, have an impact on learning.

### **Statement of Problem**

With rates of autism steadily increasing, children with high functioning autism are typically being placed in general education classrooms. According to the U.S. Department of Education from 2013 to 2014, there was a 2.24% increase in autism diagnoses rates among children (Black et al., 2015). A study conducted by Crosland and Dunlap (2012) reported that 50% of all children diagnosed with autism are diagnosed with high functioning autism and are therefore typically placed in general education classroom settings, resulting in an 800% nationwide increase in students with autism in the general education school systems. This increase places the burden of making academic accommodations solely on the teacher. Fifty percent of teachers report they have received very little training surrounding autism and how to best implement instructional practices for autistic students in their classrooms (Sansosti & Sansosti, 2012). Lack of training may cause many challenges for both the teacher and students.

Currently, minimal research has been conducted on the impact of teachers' perceptions of students with high functioning autism on their learning environment. This research study will examine teachers' perceptions of autistic students and their impact on the child's learning environment. Further study of teachers' perceptions of autistic students and its impact on student learning will provide educational leaders and educators with valuable information on how to best meet the academic needs of autistic students. Better understanding of teachers' perceptions surrounding autism can help to facilitate policy change within school districts. Training teachers about the implementation of best teaching practices and strategies, along with ways to best

support the academic needs of autistic students, would be an excellent first step to enable these policy changes.

### **Purpose of the Study**

This research study examined teachers' perceptions of autistic students and their impact on the child's learning environment. The purpose of this qualitative research study is to examine, explore, and describe teachers' perceptions towards high functioning autistic students and its impact on the student's learning environment in suburban elementary school inclusion classrooms. Fundamental concepts of this research study are the teacher's understanding teachers' surrounding autism as a whole; teachers' knowledge of key instructional practices with autistic students; and the teachers' perceptions of autistic students in general. Other fundamental concepts of this research study are the individual teacher's abilities to teach autistic students and the teacher's ability to implement trends in autism intervention strategies used in inclusion classrooms.

Currently, there is a significant gap in the research, as very little research exploring teachers' perceptions of autistic students and their impact on autistic students' academic outcomes has been conducted. Therefore, further research needs to be conducted to fill in this gap. This research study improves understanding of the role teachers' perceptions may play in the academic outcomes of autistic students.

### **Research Questions**

In order to best meet the academic needs of high functioning autistic students placed in inclusion classrooms, researchers must first understand the role teachers' perceptions of autistic students may have on their learning environment. This study addressed current gaps in research by answering the following questions:

- How do teachers perceive high functioning autistic students' academic capabilities?
- How does a teacher's training about autism impact the teacher's perception towards a student's academic capabilities?
- How does a teacher's perception towards a student's diagnosis impact teaching strategies?

Each research question utilized the sociocultural/social constructivist learning theory to help fill in current gaps in the research by exploring the role teachers' perceptions play in student learning.

### **Conceptual Framework**

Learning is a complex process since no two learners or educators are the same. The learning theory focuses on determining the best teaching practices to support student learning by examining four main areas of influence: behavioral, cognitive, constructive, and sociocultural. In general, the learning theory recognizes and examines the impact the teaching environment, social environment, and cognitive functions potentially have on a student's educational experience (Woolfolk, Davis & Anderman, 2013). Over the years, there have been many learning theories created in order to determine the best possible means for conducting teaching in order to better understand student engagement and learning.

In the 1990s, a shift in educational theory occurred when educational scholars revisited the philosophy that a child's investment in school varied based on the role of parents, teachers, schools, and society in the child's life. The sociocultural/social constructivist learning theory was further developed and used to examine the role these four variables play in mediating the learning process. The sociocultural/social constructivist learning theory also examines best

teaching practices to support underrepresented students, such as students with disabilities (Woolfolk, Davis & Anderman, 2013). Sociocultural/social constructivist learning theorists believe that as leaders, teachers can have a positive influence on students when teaching practices are continuously working to meet the needs of the underrepresented student (Woolfolk, Davis & Anderman, 2013). Sociocultural/social constructivist learning theorists believe that ensuring that all learners are active in their learning process and have a voice in their education will yield positive influences on a student's learning environment. The sociocultural/social constructivist learning theory lens will be utilized for this study.

The sociocultural/social constructivist learning theory guided this study since it focuses on roles parents, teachers, schools, and society play in mediating the learning process of underrepresented students. A sociocultural/social constructivist learning theory lens was utilized in order to examine the larger contextual impact teachers' perceptions surrounding autism has on the student's learning environment.

### **Assumptions, Limitations, and Scope**

There are several limitations and assumptions present throughout this study. A major assumption within the framework of the study is that teachers' perceptions have an impact on students' learning environment, either in a positive or negative way. In this study, assumptions are based on the sociocultural/social constructivist learning theory's belief that teachers, schools, and society play a role in mediating a student's learning process. Another assumption present throughout this study is the idea that teachers will have either positive or negative perceptions of autistic students.

There are several limitations to the study due to the sample size and geographical location. Limitations include teachers' honesty while completing the questionnaire, small

sample size, and the ability to generalize the findings to non-suburban geographic locations. My personal bias and the bias of interviewees are limitation to the study. Both my bias and previous experiences with my son are limitations to the study.

According to Creswell (2012) a researcher can decrease bias within a study by being sensitive, respectful, and inclusive. In order to ensure that my potential personal bias did not interfere with the research study, I maintained professional throughout the course of the study. I strived to use respectful, inclusive language, not exclude/offend anyone, and was sensitive to the teachers' responses by imagining what it would be like to be in their shoes. One way that I ensured that teachers were as honest as possible with me was by conducting my research study in an anonymous online open-ended questionnaire format, and by informing the teachers that all data would be anonymous, encrypted, and securely stored. Despite these limitations, this research study provided educators with pertinent information regarding teachers' perceptions of high functioning students with autism and whether their perceptions impact the students' learning environment.

### **Significance**

Currently, there is very little research on teachers' perceptions of autistic students. Since little research has been conducted, this study is significant to the field of educational leadership, teaching, and teaching best practices by providing findings on the role of teachers' perceptions on autistic students' learning environment. There are several areas of significance for both educators and school systems surrounding their ability to best support autistic students' academic success.

The findings from this study will help educators identify ideologies, feelings, and beliefs that may influence their perceptions of autistic students. It offers professional learning

suggestions to schools and a call to action to ensure that schools are providing the proper training, support, and tools to their educators. This in turn will provide autistic students with the best possible education. The findings of this study are significant because findings provide recommendations for educational leaders and teachers who can offer students with and without autism equal learning experiences and opportunities within the classroom. Overall, this study will help teachers gain a better understanding of their perceptions of students with high functioning autism and its potential impact on the students' learning environment.

### **Definitions of Terms**

In order to fully understand how students with autism learn in schools, some definitions are provided. Teachers without training or knowledge surrounding the diagnosis and academic needs will need this information as a foundation.

*Autism:* A neurodevelopmental disorder that impacts an individual's social functioning and interferes with their ability to communicate. Individuals with autism also experience restrictive, repetitive, and stereotyped behaviors (American Psychiatric Association, 2013). Impairment causing clinical and significant impairment within social, occupational, or other areas of functioning (Sansosti & Sansosti, 2012).

*Educators: Teachers, principals, and special educators:* State licensed educator who possesses a Bachelor's or Master's degree in Education and has passed the Massachusetts Test for Educator Licensure (MTEL).

*Inclusion:* Schools and classrooms where both general education students and students with special needs learn together (Chamberlin, Kasari, & Rotheram, 2003).

*Pervasive Developmental Disorders*: Diagnostic category that was utilized prior to 2015, which included the autism spectrum disorder in the Diagnostic and Statistical Manual IV-TR (American Psychiatric Association, 2000).

*Responsive Classroom*: A teaching style designed to integrate both social and academic learning for students into the classroom environment and lesson plans (Rimm-Kaufman, et al., 2007).

*Restricted Interests*: Topics, interests, or objects that an individual with autism tends to focus on with extreme intensity. Sometimes they are viewed as obsessions, compulsions, and/or special interests (Leekam, Prior, & Uljarevic, 2011).

## **Conclusion**

Given the exponential increase in the prevalence of students with autism, it is imperative that schools and school leaders fully understand the potential impact of teachers' perceptions of students with high functioning autism on the students' learning environment. The main purpose of this study is to examine, describe, and understand this potential impact on the students' learning environment. This study will help school leaders be aware of the range of teachers' perceptions towards autistic students and their impact on learning outcomes. Findings from the study offer guidelines so school leaders provide the proper training, support, and tools to their teachers so they in turn can provide students with the best possible education. Overall, this study will help educators become better leaders.

It is important to fully understand up-to-date literature, research, and relevant information in order to comprehend potential implications teachers' perceptions of students with high functioning autism may have on the students' learning environment. Chapter two reviews the most up-to-date foundational and relevant literature surrounding history, defining characteristics,



and prevalence rates of autism; therapeutic interventions; inclusion trends and rates within the education system; educators' perceptions of inclusion classrooms; educators' perceptions of autism; factors for successful inclusion; and implications for further research. Chapter three discusses the study's methodologies including setting, sample size, participants, data collection, and analysis, as well as participants' rights and limitations to the study. Chapter four examines the results of the study including data analysis and findings. Chapter five provides an overview of interpretations of findings including further implications, and recommendations for further research and action.

## **CHAPTER 2**

### **REVIEW OF THE LITERATURE**

Over the years, there have been many changes in how members of society view, diagnose, and treat Autism Spectrum Disorders (ASD). Autism is the fastest growing neurodevelopment disorder in children with a 57% rate increase from 2002 to 2006 (Baio, 2012). Since 1992, there has been an 800% increase in the number of autistic students receiving an education within the public education system (Crosland & Dunlop, 2012). Based on a federal ruling in 1971 requiring more integrated approaches to special education, children with high-functioning autism are often placed within inclusion classrooms where both general education students and students with special needs learn together. Sometimes, the student is assigned a one-on-one teaching aid to assist them with day-to-day classroom activities, while other times little to no services are provided by the school district. This lack of academic support services places the burden of making academic accommodations solely onto the teachers. Fifty percent of teachers report that they receive little-to-no training about autism and how to implement best practices of teaching autistic students into their classrooms (Sansosti & Sansosti, 2012).

The purpose of this qualitative research study is to examine, explore, and describe teachers' perceptions towards high functioning autistic students and its impact on the student's learning environment in suburban elementary school inclusion classrooms. The research questions address the less well understood topic of teachers' perceptions of autism and the academic outcomes of children with autism. They are as follows:

- How do teachers perceive high functioning autistic students' academic capabilities?

- How does a teacher's training on autism impact the teacher's perception towards a student's academic capabilities?
- How does a teacher's perception towards a student's diagnosis impact teaching strategies?

There are a number of common themes present in current research. Rates of autistic students placed in inclusion classrooms have increased each year. Additionally, while teachers support the concept of inclusion classrooms, many teachers feel undertrained and underprepared to meet the academic needs of autistic students (Chamberlin, Kasari, & Rotheram, 2003; Dahle, 2003; Crosland & Dunlap, 2012; Sansosti & Sansosti, 2012). Teachers believe that inclusion classrooms are necessary and important to autistic students' development of social skills by forcing them into daily age-appropriate social situations. In return, inclusion often times comes hand-in-hand with some major challenges for teachers and students (Chamberlin, Kasari, & Rotheram, 2003; Crosland & Dunlap, 2012; Sansosti & Sansosti, 2012). Overall, lack of training and knowledge was identified by teachers as the largest challenge they face and is the number one source of resistance to inclusion classrooms for many educators (Barnett & Monda-Amaya, 1998). More than half of the teachers teaching in inclusion classrooms feel that they need more training about the autism diagnosis (Sansosti & Sansosti, 2012). Therefore, the rationale for further research begins with examining the current gap in the research to explore potential connections between teachers' perceptions of autism and its impact on academic outcomes.

### **Methods of Literature Collection**

I am the sole author and conducted all searches for relevant data. Over the past two years, I collected peer-reviewed research articles via EBSCO and web searches. Books and journal articles were also found through web searches. Most sources were published within the

last ten years, except sources used for a historical perspective surrounding diagnostic criteria. Collected sources were found online through keyword search queries and web searches using keywords such as autism, inclusion, educators' perceptions, teachers' perceptions, and pervasive developmental disorders. A snowball methodology was used and additional materials searched through reviewed relevant journals. A total of 45 data resources were reviewed. Of those sources, 25 data sources were kept, 23 of those 25 sources were used for the literature review, and the other 20 data sources were discarded due to either the date of publication or finding that the content did not entirely pertain to my study. This set of data resources assisted me in developing an in-depth understanding of the diagnostic criteria of autism, historical perspective of inclusion classrooms, information on educators' perceptions of the autism diagnosis and/or inclusion, as well as the prevalence rates of autism.

### **History of Autism**

Autism spectrum disorders (ASD) are not entirely understood with much of their etiology, symptomatology, and functioning levels remaining unknown (Horrocks, White, & Roberts, 2008). The last twenty to thirty years have seen a marked increase of research conducted on autism with the hope of better understanding a disorder that impacts so many families and children. The collections of behaviors currently defined as autism were developed based on the observations of a clinician named Leo Kanner in 1943 (Horrocks, White, & Roberts, 2008). He observed an unusual set of patterns and behaviors surrounding social, communication, cognitive, and motor development in a small group of children. Around the same time, without knowledge of Kanner's work, a German pediatrician named Hans Asperger also wrote about observing similar behaviors and patterns in a small group of boys (Lord, 1992). Initially, even after these observations, autism was not distinguished by a formal clinical

diagnosis. Autism's specific diagnostic criteria were first developed in 1978 and were proposed by the National Society for Autistic Children to the American Psychiatric Association (Lord, 1992). In 1980, the American Psychiatric Association included the formal diagnosis of autism in the Diagnostic and Statistical Manual III (DSM-III). Since its introduction, the diagnostic criteria for autism have changed with the creation of each new diagnostic statistical manual (Lord, 1992).

From 2000 to 2014, the Diagnostic and Statistical Manual IV-TR (DSM-IV-TR) classified autism as a pervasive developmental disorder (PDD). PDDs were viewed as neurological disorders, which included various other diagnostic sub-types other than autism. Other diagnostic sub-types included in the PDD spectrum were: autistic disorder, Retts' disorder, childhood disintegrative disorder, Asperger disorder, and PDD not otherwise specified (PDD-NOS) (Coolidge, et al., 2013; American Psychiatric Association, 2000). In 2013, the American Psychiatric Association streamlined the diagnostic criteria for autism by creating a new single diagnosis approach of viewing autism spectrum disorders by eliminating the PDD diagnosis and all of its subcategories. This shift in the diagnostic category was based on the idea that autism should be defined by a single set of common behaviors, which are best represented within a single diagnostic category of autism spectrum disorders (ASD) (Coolidge, et al., 2013).

### **Defining Characteristics of Autism**

With the creation of the newly released Diagnostic Statistical Manual 5th Edition (DSM-5) the diagnostic criteria for autism dramatically shifted (American Psychiatric Association, 2013). The DSM-5 (2013) classifies autism spectrum disorders (ASD) as neurodevelopment disorders. ASD impacts an individual's social functioning and interferes with his or her ability to communicate. Individuals with ASD also experience restrictive, repetitive, and stereotyped

behaviors. The DSM-5 (2013) requires that before the age of three, delays and/or abnormal functioning in one of the following must be present: social interactions, social communication language, and/or symbolic or imaginative play (Coolidge, et al., 2013).

### **Current Diagnostic Framework**

According to the DSM-5 (2013), various features must be present in order to diagnose an individual with an ASD. The four main areas where defects must be present are: social/communication deficits; restrictive and/or repetitive patterns or interests; symptoms must be present in early development; and all symptoms must cause clinically significant impairment (American Psychiatric Association, 2013).

The first essential feature of ASD is persistent impairment in reciprocal social communication and social interactions. These impairments must occur in at least one of the following areas of the individual's life: social and emotional reciprocity; non-verbal communication skills used in typical social interactions, and/or developing; and maintaining and understanding relationships (American Psychiatric Association, 2013).

The second essential diagnostic feature of ADS is the presence of restricted and/or repetitive patterns of behaviors, interests, or activities. These patterns of behaviors, interests, or activities must occur in at least two or more of the following ways:

- Stereotyped or repetitive movements of the body, speech, use of objects and/or speech.
- Insistences on sameness, unbendable adherence to routines, ritualized patterns of verbal or non-verbal behaviors.
- Fixated and highly restricted on specific interests. The fixation is abnormal in intensity or focus.

- Hyper- or hypo-activity to sensory input or unusual interest in sensory aspects of their environment. (American Psychiatric Association, 2013)

### **Severity Clarification System**

The severity of the social communication impairments and restricted/repetitive patterns and/or behaviors are based on the diagnostic severity levels of classification specifiers. Levels of severity and amount of support needed surrounding the individual's impairment in reciprocal social communication, social interactions, and/or restricted and/or reparative patterns vary depending on where the individual's symptoms fall within the DSM-5's severity classification system. According to the DSM-5 (2013), there are three diagnostic levels of severity for ASD: level 1, level 2, and level 3. Variations in classification levels depend on the person's level of impairment and need for support.

Individuals diagnosed with ASD with a severity of level 1 require the least amount of support and services. The level 1 severity includes individuals who have social and communication impairments that are noticeable; inflexible behaviors that cause interference with day-to-day functioning; difficulties initiating social interactions with others; and decreased interest in socializing with others (American Psychiatric Association, 2013).

Individuals diagnosed with ASD with a severity of level 2 require a substantial amount of therapeutic support and services. The level 2 severity includes individuals who have noticeable and significant social and communication impairments. Social impairment is significant, even with support services in place. Impairments include limited initiation of social interactions, highly inflexible behaviors, and considerable difficulties coping with change (American Psychiatric Association, 2013). The individual's restricted/repetitive patterns or behaviors frequently interfere with functioning.

Individuals diagnosed with ASD with a severity level of 3 require a very extensive amount of support and services. Impairments of a level 3 severity are highly noticeable and cause significant limitations for the individual. People with a level 3 diagnosis are very limited in their initiation of social interactions with others, as well as minimal response from social interactions initiated by others. The person is highly inflexible in his or her behaviors and has an extremely difficult time coping with change. Others frequently observe the individual's restricted/repetitive patterns or behaviors, which causes a severe amount of distress for the individual (American Psychiatric Association, 2013).

### **Prevalence of Autism**

Over the past 30 years, research has demonstrated a dramatic increase in children diagnosed with ASD. In 2000, the Center for Disease Control and Prevention (CDC) created the Autism and Developmental Disabilities Monitoring Network (ADDMN) to collect, review, and compile statistical data surrounding the prevalence rates of ASD and other developmental disabilities present within the United States (Rice, 2009).

In the 1970s, the reported prevalence rate was estimated to be around 1 in 2,500 children (Kabot, Masi, & Segal, 2003). More recent studies have demonstrated a dramatic increase in children diagnosed with autism. In 2000, the CDC (2012) reported that 6.7 per 1,000 children age eight were diagnosed with autism. Rates in 2004 reportedly increased to 8 per 1,000 children age eight (Baio, 2012). Again, rates demonstrated a steady increase in 2006 with diagnosis statistics rising to 9.0 per 1,000 children age eight. Overall, the CDC reported an estimated 57% increase in ASD prevalence rates from 2002-2006 (Baio, 2012). Currently, the CDC is reporting that one in 68 children are being diagnosed with a form of ASD (Baio, 2014).



Many factors have potentially caused this sudden and dramatic increase in autism rates. Until recently, ASD was rarely diagnosed before the age of four, but research now shows that possible signs and indicators can be present in some infants as young as 9-18 months and that early intervention services may be the reason for the increase in rates (McIntyre & Barton, 2010). Kabot, Masi, and Segal (2003) believe that the increase in autism rates is due to advancements made in screening tools, a better understanding of the diagnosis, and an increase in training surrounding assessment. Since professionals are now better trained in the behavioral and emotional factors related to autism, they are more likely to screen accurately for the disorder, therefore causing a spike in the diagnosis (Kabot, Masi, & Segal, 2003).

The shift in the biological makeup of children's brains may be the cause for these sudden rate increases. Over the past ten years, several studies have compared the brain structures of typical children to children with autism. Researchers believe that abnormalities within the brain in the limbic system, frontal lobe, and corpus callosum account for the significant increase in diagnosis rates (Leekan, Prior & Uljaravic, 2011). Kabot, Masi, & Segal (2003) found that children with autism were observed to have a normal brain volume at birth, but by the age of two or three have an increased cerebral and cerebella white matter and cerebral cortical gray matter. Another study that examined the corpus callosum concluded that individuals with autism have an increase in brain volume and a larger corpus callosum than typical children (Prigge, et.al, 2013). Studies have also found that one-third of all children with autism have elevated levels of serotonin and a diminished ability to synthesize serotonin (Volker & Lopata, 2008). This research suggests that there are physical differences in the brain size, makeup, and function of children with autism.

## **Evidence Based Therapeutic Treatments**

Previous research has determined that on average children receive therapeutic support services 12.64 months before receiving a formal diagnosis (McIntyre & Barton, 2010).

According to McIntyre & Barton (2010), even though therapeutic services are initiated prior to a formal diagnosis, parents report an increase in services after their child's formal diagnosis.

These findings suggest that it is important for a child to receive an official diagnosis in order to access necessary support services. The most commonly used and effective treatments for children with autism are behavioral interventions, applied behavioral analysis, cognitive behavioral interventions, and psychopharmacological interventions.

### **Behavioral Interventions**

Behaviors interventions include the use of skill-based behavioral strategies that specifically target maladaptive behaviors (Leekman, Prior, & Uljarevic, 2011). Studies have demonstrated that the use of behavioral interventions focusing on restricted interests has helped to improve the functioning of children with autism (Mancil & Pearl, 2008). Using restricted interests as motivators in behavioral intervention strategies helps children with autism to stay engaged during academic activities. Difficulties with maintaining academic engagement is a problem often observed in children with autism, as 75% of children with autism also exhibit difficulties with attention, focus, and hyperactivity. These are also behaviors typical in children with attention-deficit/hyperactivity disorder (Mancil & Pearl, 2008).

### **Applied Behavioral Analysis**

Applied behavioral analysis (ABA) is the most commonly used behavioral intervention. ABA is an intervention strategy that focuses on the positive reinforcement of social and communication skills (Leekman, Prior, & Uljarevic, 2011). ABA has been proven to have a

significant impact on a child with autism's ability to increase social functioning, communication skills, and play with others. Volker & Lopata (2008) determined that for behavioral interventions to significantly improve social and communications skills in children with autism, intensive one-on-one support must occur for 40 plus hours per week.

### **Cognitive-Behavioral Interventions**

Cognitive-behavioral interventions focus on increasing cognitive and language skills by utilizing a combination of direct instructions, modeling, role-playing, and/or reinforcement (Volker & Lopata, 2008). This approach is best used in a group setting so that it offers the child with autism ample opportunity to practice cognitive and language skills in a comfortable environment to develop relationships. Overall, cognitive-behavioral interventions have been proven to significantly increase children with autism's social skills (Volker & Lopata, 2008).

### **Responsive Classroom Model**

The responsive classroom (RC) approach is a teaching style designed to integrate both social and academic learning for students into the classroom environment and lesson plans (Rimm-Kaufman, et al., 2007). A study conducted by Brock et al., (2008) determined that children in a RC model classroom increase a student's social behaviors and academic performance.

Teachers who utilize a RC approach also directly influence a child's perceptions of social situations (Abry, et al., 2013). These shifts in their perceptions create an increase in students' social and academic outcomes. Students within a responsive classroom tend to have an increase in positive social practices. Aubrey et al., (2013) conducted a study that identified that the responsive classroom approach creates classroom conditions that are optimal for a student's social, emotional, self-regulatory skills, with the main focus of increasing academic outcomes.

Research has also demonstrated that the use of a responsive classroom approach with elementary school children significantly increases a student's reading and mathematics skills (Abry, et al., 2013). It was determined that the responsive classroom approach created a positive connection with teachers focusing on child-centered discipline, collaboration, and teaching practices.

Research demonstrates a correlation between teachers who utilized a RC approach and an increase in the teacher working collaboratively with other teachers (Abry, et al., 2013 & Brock, et al., 2008). This increase in teacher collaboration enhances a teacher's self-efficacy and improves their attitudes towards teaching ASD students. Overall, current research results show that the use of the RC approach positively impacts the classroom environment for both the students and the teacher (Abry, et al., 2013 & Brock, et al., 2008).

### **Psychopharmacological Interventions**

Many pharmacological medications have been widely used in the treatment of autism. The most typical medications used are atypical antipsychotics, selective serotonin reuptake inhibitors (SSRIs), and opioid antagonists (Leekman, Prior, & Uljarevic, 2011; Volker & Lopata, 2008). All three of these medications are proven to decrease symptoms to a limited degree surrounding repetitive behaviors. Atypical antipsychotic medications are used to reduce the level of serotonin and dopamine present in the brain. Studies have shown that after eight weeks on antipsychotics, such as Risperidone, children experienced fewer tantrums and sensory, motor, self-injurious and/or aggressive behaviors (Leekman, Prior, & Uljarevic, 2011). SSRIs are also proven to be effective in reducing repetitive and obsessive behaviors by regulating and increasing the amount of serotonin present in the brain (Leekman, Prior, & Uljarevic, 2011; Volker & Lopata, 2008). Overall, pharmacological treatments have been proven to be effective in reducing aggressive behaviors, inattention, motor hyperactivity, and behavioral problems.

## **Inclusion within the Education System**

Inclusion classrooms and schools focus on ensuring that the specific academic needs of students with special needs are being met without segregating the student from the general education population (Horrocks, White, & Roberts, 2008). Advocates of inclusion classrooms and schools believe that all children have the right to receive an education from their local neighborhood school, even children with special needs (Sansosti & Sansosti, 2012). In general, they believe that for schools to become successful in teaching children with special needs, students' emotional, behavioral, and instructional needs must be addressed as part of standard institutional practices, policies, and organizational beliefs (Barnett & Monda-Amaya, 1998). Many educators are embracing the idea that inclusion classrooms are the most efficient way to ensure that the specific academic needs of students with special needs are being met.

### **Historical Perspective**

The concept of inclusion classrooms dates back to 1971 based on a federal district court ruling in Pennsylvania on behalf of children with disabilities and their right to a public education (Horrocks, White, & Roberts, 2008). The ruling stated that children diagnosed with mental retardation were entitled to a free public education and that they should be educated within regular education classrooms whenever possible. Pennsylvania state legislation was then followed by three federal laws that shifted the entire educational system within the United States: The Education of All Handicapped Children Act (EAHCA) in 1975; the Individuals with Disabilities Education Act in 1990; and finally, the No Child Left Behind Act in 2002 (Horrocks, White, & Roberts, 2008). As a result of these three legislative rulings, the concept of inclusion classrooms was developed, as each state's public school system was now required to provide a comprehensive and least-restrictive educational setting for all children with disabilities.

## **Statistical Data on Inclusion Rates**

The number of children placed in inclusion classrooms is growing each year based on federal regulations, a better understanding of special needs students, and a growing emphasis on the inclusion model of education. Since 1992, there has been an 800% increase in special needs children within the general educational system (Crosland, & Dunlap, 2012). Specifically, from 1992-2006, there was a 244% increase in students with ASD placed within inclusion classrooms (Sansosti & Sansosti, 2012). The Department of Education estimated in the 1992-1993 school year that 9% of children in general education classrooms were diagnosed with ASD. These numbers increased to 31% in the 2005-2006 school year (Sansosti & Sansosti, 2012). A study conducted by Sansosti & Sansosti (2012) determined that the largest factor taken into consideration surrounding the potential placement of ASD students within general education classrooms was the student's overall functioning level. Studies suggest that students with an elevated IQ, increased communication skills, and less autism-like symptoms tend to have a higher likelihood of being placed in general education classrooms (Sansosti & Sansosti, 2012; Crosland, & Dunlap, 2012).

## **Current Research on Inclusion Classrooms**

Numerous studies have documented the challenges and benefits of the inclusion of students with autism to general education classrooms. As inclusion classrooms have become a more common phenomenon within the public education system, research about the role of integrated classrooms has become more readily available. Educators have varied attitudes, beliefs, and opinions on inclusion classrooms and if they are useful or a hindrance for both the teachers and the general education students (Chamberlin, Kasari, & Rotheram, 2003; Dahle, 2003; Crosland & Dunlap, 2012). In general, current research demonstrates that educators

believe that the benefits of inclusion are often coupled with some significant challenges for both non-ASD students and the educators (Chamberlin, Kasari, & Rotheram, 2003; Dahle, 2003; Crosland & Dunlap, 2012).

### **Benefits of Inclusion Classrooms**

Research has demonstrated many positive outcomes for ASD students in inclusion classrooms. Dahle (2003) determined the most positive benefits have been noted surrounding social engagements and interactions. The research found that ASD students in inclusion classrooms tend to have a larger social network of friends and are included in activities at the same frequency as children without a disability (Chamberlin, Kasari, & Rotheram, 2003). General education classrooms are also beneficial by providing autistic students with a more rigorous, demanding, and grade-level educational experience (Chamberlin, Kasari, & Rotheram, 2003; Sansosti & Sansosti, 2012). A study conducted by Sansosti and Sansosti (2012) determined that many teachers believed that inclusion classrooms are necessary and important to autistic students' development of social skills by forcing them into daily age-appropriate social situations. Furthermore, they found that inclusion classrooms are known to be beneficial to students without autism by offering a classroom environment that incorporates additional academic, behavioral, and environmental supports.

Peer-mediation interventions involve typically developing peers as social skill mentors, which promotes appropriate communication and social skills (Crosland & Dunlap, 2012). Research has demonstrated the major benefit of inclusion classrooms by having the ability to implement peer tutoring as a means of improving social reciprocity in a natural social context (Crosland & Dunlap, 2012). Crosland & Dunlap (2012) observed gains in reading fluency,

reading comprehension, and social interactions in students with autism based on a class-wide implementation of peer tutoring.

Observational learning is defined as the ability to learn through the act of observing the behaviors and actions of others (Nadel, et.al, 2011). A major benefit of inclusion classrooms is that autistic students have the opportunity to utilize an observational learning technique by observing typical children's behaviors daily. Studies have indicated that observational learning is an effective method of learning that increases autistic students' memory and learning outcomes (Nadel, et.al, 2011). Daily observational learning through inclusion classrooms helps ASD students improve their social and communication skills by decreasing adult intervention dependency and increasing regular peer interactions (Hart & Whalon, 2013).

### **Challenges of Inclusion**

The increase in the number of students with ASD in general education classrooms can cause many challenges. For inclusion classes to be successful, regular education teachers and students must understand how to academically and emotionally support and care for students with autism (Crosland & Dunlop, 2012). Often ASD students are placed in classrooms with teachers who feel inadequately prepared and/or trained on the student's social, educational, and behavioral needs.

This lack of training, resources, and preparedness causes major challenges for both the student and teacher (Horrocks, White, & Roberts, 2008; Busby, et al., 2012). For example, autistic students struggle and have very little experience with developing and maintaining peer relationships. Teachers acknowledge the importance of social skill instruction for students with autism, yet research suggests that evidence-based practices focusing on social skill communication instruction are rarely employed (Hart & Whalon, 2013). Horrocks, White, &



Roberts (2008) found that lack of training and knowledge identified by teachers is the largest challenge they face and is the main source of resistance for many educators in enacting practices of inclusion into their classrooms. Sansosti and Sansosti (2012) also found that more than half of the teachers teaching in inclusion classrooms feel that they need more training on the autism diagnosis.

Teachers often have a limited understanding of the disorder, lack of exposure, and may have stereotypical definitions surrounding the disorder. Barnett & Monda-Amaya (1998) demonstrated that a lack of training about the disorder leads to a limited understanding and definition of inclusion. This lack of definition and understanding of inclusion classrooms leads to inconsistencies in the way inclusion classrooms are conducted (Barnett & Monda-Amaya, 1998). More recent research has determined that school-wide consistency and training are imperative for inclusion to be fruitful and will decrease challenges for both the teachers and students (Crosland, & Dunlap, 2012).

Teachers believe that one of the largest barriers and challenges with the inclusion of ASD students are potential behavioral problems and disruptive behaviors (Crosland & Dunlap, 2012). A study conducted by Sansosti and Sansosti (2012) found that teachers identified concerns with behavioral problems and disruptive behaviors and their potential impact on the learning, safety, and well-being of the other students. Many teachers felt that these challenging behaviors could be distracting and disruptive to the learning environment of the other students. Teachers feared that the possibility of tantrums and aggressive physical outbursts could be potential safety risks to the other students and that they could lead to the rejection of the student with autism (Sansosti & Sansosti, 2012).

## **The Role of Segregated Classrooms**

Even though most of the research demonstrates positive outcomes for the inclusion of ASD students within general education classrooms, there are some benefits of segregated programs (Sansosti & Sansosti, 2012). Some students with autism may benefit from segregated programs as they provide individualized one-on-one educational instruction. Segregated programs allow ASD students to learn behavioral regulation skills, adaptive skills, and social skills in an environment where they are less likely to feel rejected by other students. Segregated programs also allow the student to work with teachers who have specialized training about their diagnosis (Sansosti & Sansosti, 2012).

## **Educators' Perceptions of Inclusion Classrooms**

Since the federal mandate to implement inclusion classrooms, educators have needed to shift the way in which they conduct their classrooms. In 1998, a survey of school principals found that they believed inclusion was only appropriate for children with mild disabilities. Principals felt inadequately prepared and did not agree with placing students with significant disabilities in inclusion classrooms (Barnett & Monda-Amaya, 1998). Recent studies have indicated a dramatic shift in educators' thinking. In general, studies have found that both principals and teachers believe that children with ASD should be included in the general education classrooms (Harrocks, White, & Roberts, 2008; Sansosti & Sansosti, 2012).

A study conducted by Harrocks, White, and Roberts (2008) found that both principals and teachers agreed that autistic children should be included in regular education classrooms. The study concluded that educators with more professional and positive experience with inclusion classrooms were more likely to have more positive attitude towards the inclusion of autistic students. However, principals with more experience in their current school district were

less likely to have a positive attitude towards the inclusion of autistic students. Harrocks, White, and Roberts (2008) determined that educators with longer tenure have been part of a non-inclusive school for the majority of their career; therefore, they have little knowledge and experience about inclusion practices.

Sansosti and Sansosti (2012) found that educators positively viewed inclusion classrooms since they believed that the classrooms' high expectations and demands have a positive impact on children with autism. Teachers believed that inclusion is positive for autistic students because it increases their social skills, challenges them academically, and exposes them to new social situations (Sansosti & Sansosti, 2012). Teachers also viewed inclusion positively because it improves the learning environment for the entire class by the implementation of class-wide behavioral supports.

### **Educators' Perceptions of Autism**

General studies have concluded that teachers do not report differences in how they view students with autism versus typical-functioning students. Teachers' attitudes and beliefs can influence how they feel about students and their level of expectations. These beliefs and expectations can influence a student's self-image and academic performance (Park & Chitiyo, 2011). Overall, current research has demonstrated that educators have positive attitudes surrounding students with autism. Prior to the regular inclusion of students with autism, teachers tended to have a more negative attitude towards autism (Park & Chitiyo, 2011). Current research has demonstrated that gender, age, experience, and the role of the inclusion movement may play a crucial role in impacting teachers' positive attitudes (Harrocks, White, & Roberts, 2008; Park & Chitiyo, 2011).

Teachers with more exposure to children with autism are more likely to have positive attitudes towards the diagnosis. Female teachers tend to have more positive attitudes than male teachers towards children with autism (Park & Chitiyo, 2011). Furthermore, the age of the teacher plays a role in his or her attitude. Teachers above the age of 56 reported lower attitude scores than teachers between the ages of 20 to 55 years old (Park & Chitiyo, 2011).

Harrocks, White, & Roberts (2008) and Park & Chitiyo (2011) found that teachers with a better understanding of the disorder tend to have a more positive attitude towards autism. The more exposure to children with autism a teacher had, either through previous experience in special education, having friends or family members with a disability, or other contact, the more positive was the teacher's attitudes towards autism (Park & Chitiyo, 2011). Overall, teachers with more positive attitudes towards autism tended to have stronger beliefs that a child with ASD should be integrated into a general education classroom (Harrocks, White, & Roberts, 2008).

### **Factors for Successful Inclusion Classrooms**

Many factors are important for a child with autism to be successful in an inclusion classroom. Sansosti and Sansosti (2012) conducted focus groups and individual interviews with teachers to explore what characteristics make students with autism successful in inclusion classrooms. Seventy-five percent of teachers identified good communication skills as a key factor for successful inclusion (Sansosti & Sansosti, 2012). Sansosti and Sansosti (2012) determined that toilet training was identified as the single most important self-care concern among educators. Teachers believed that if a child is not toilet trained they should be kept out of inclusion classrooms.

Hart and Whalon (2012) determined that establishing a learning environment that reflects evidence-based best treatment practices supports the various academic and behavioral needs of

ASD students. Meeting these needs is imperative to their success. Social interactions within the classroom must be built upon evidence-based best practices for inclusion to be fully successful. Teachers need to be trained to proactively create a learning environment that supports the needs of students with autism (Hart & Whalon, 2012). Both Sansosti and Sansosti (2012) and Hart and Whalon (2012) articles agreed that to increase a student's academic success, the student must be given ample opportunity to have successful social interactions with other students.

Additional research has documented the importance of the overall school environment as a key factor to the successful inclusion of students with autism. Crosland and Dunlap (2012) examined current trends and factors for the successful inclusion of autistic students. Teachers who identified a positive school culture proved to have the most significant impact on students with ASD in an inclusion setting (Crosland & Dunlap, 2012). Positive organizational environments are created by having a supportive school leader, funding for resources, training, data-based decision making, and team decision making in place (Crosland & Dunlap, 2012). Harrocks, White, & Roberts (2008) determined similar findings that for inclusion to be successful, teachers must understand autism and be prepared to respond to the behavioral manifestations of the disorder while meeting the complex social and academic needs of the students.

### **Conceptual Framework**

Learning is a complex process since no two learners or educators are the same. The learning theory focuses on determining the best teaching practices to support student learning by examining four main areas of influence: behavioral, cognitive, constructive, and sociocultural. In general, the learning theory recognizes and examines the impact that the teaching environment, social environment, and cognitive functions potentially have on a student's

educational experience (Woolfolk, Davis & Anderman, 2013). Over the years, there have been many learning theories created to determine the best possible means for conducting teaching to better understand student engagement and learning.

In the 1990s, a shift in educational theory occurred when educational scholars re-examined progressive beliefs that children's investment in school varied based on the role of parents, teachers, schools, and society in the child's life. The sociocultural/social constructivist learning theory was created to examine the roles parents, teachers, schools, and society may play in mediating the learning process. The sociocultural/social constructivist learning theory also examines best teaching practices to best support underrepresented students, such as students with disabilities (Woolfolk, Davis & Anderman, 2013). Sociocultural/social constructivist learning theorists believe that leaders/teachers can have a positive influence on students when teaching practices are continuously ensuring to meet the needs of the underrepresented student (Woolfolk, Davis & Anderman, 2013). A sociocultural/social constructivist learning theorist believe that ensuring that all learners are active in their learning process and have a voice in their education will yield positive influences on a student's learning environment. The sociocultural/social constructivist learning theory lens will be utilized for this study.

The sociocultural/social constructivist learning theory guided this study since it focuses on the roles parents, teachers, schools, and society play in mediating the learning process of underrepresented students. A sociocultural/social constructivist learning theory lens was utilized to examine the larger contextual impact teachers' perceptions on autism have on the student's learning environment.

## **Implications for Further Research**

In general, the research related to teachers' perceptions of autism and/or inclusion education is adequate and includes experimental, case studies, and theoretical studies, all of which provide a clear picture of overall educators' perceptions. Since one of the biggest challenges children with autism face is the potential negative perceptions, attitudes, and beliefs surrounding their disability, further research needs to examine the potential impact both positive and/or negative beliefs may have on their learning. Currently, there is a lack of research that addresses teachers' perceptions of autistic students and its impact on the child's learning environment. Further research will examine:

- How do teachers perceive high functioning autistic students' academic capabilities?
- How does a teacher's training on autism impact the teacher's perception towards a student's academic capabilities?
- How does a teacher's perception towards a student's diagnosis impact teaching strategies?

To fully understand the educational needs of autistic students, we must understand the role a teacher's attitude and lack of training may have on an autistic student's academic success. Future research will help change future teacher training policies by demonstrating a potential need for an increase in training and support systems for teachers working with students with autism. With the proper policies and supports in place for teachers, autistic students would have even more successful inclusion and academic experiences where their social and academic needs are more fully addressed. Further research study and examination needs to be conducted on this topic so educators better understand how to help students with autism gain academic success.

## **Conclusion**

The dramatic increases in both the diagnosis of autism and the use of inclusion classrooms have caused a shift in the public education system. The CDC (2012) reported an estimated 57% increase in ASD prevalence rates from 2002-2006 with a 244% rate increase in autistic students entering into general education classroom (Crosland & Dunlop, 2012). Roughly 50% of teachers feel inadequately trained and prepared to meet the academic needs of autistic students (Crosland & Dunlop, 2012). In order for inclusion classrooms to be successful, regular education educators must understand how to academically and emotionally support and care for students with autism. Currently, there is little research in the literature that examines the connection between a teacher's lack of training and knowledge of autism and its potential impact on the student's learning environment. Future research needs to be conducted on the topic of teachers' training and its potential impact on the learning environment of students with level 1 (high functioning) autism in elementary inclusion classrooms. Failure to examine teacher's training and its impact on the way a child learns is a failure to fully meet the academic needs of children with autism.



## **CHAPTER 3**

### **METHODOLOGY**

For the purpose of this research study, many methodology considerations needed to be examined. This study employed the use of a phenomenological research methodology. Phenomenological research is useful in searching for the meaning of events, experiences, and interactions amongst people in specific situations (Creswell, 2013). Using a phenomenological methodology allowed careful understanding of the underlying meaning and structure of teachers' perceptions of autistic students to build upon existing research and theories. The phenomenological approach allowed full understanding of the meaning of the teachers' perceptions and belief systems about autistic students' academic capabilities and its potential impact on the students' academic outcomes. The purpose of this qualitative research study was to examine, explore, and describe teachers' perceptions towards high functioning autistic students and their impact on the student's learning environment in suburban elementary school inclusion classrooms.

#### **Research Questions**

This study addressed current gaps in research by answering the following questions:

- How do teachers perceive high functioning autistic students' academic capabilities?
- How does a teacher's training about autism impact the teacher's perception toward a student's academic capabilities?
- How does a teacher's perception towards a student's diagnosis impact teaching strategies?

Each research question utilized the sociocultural/social constructivist learning theory to help further the dialog in the research by exploring the role teachers' perceptions play in student learning.

### **Setting**

The school districts utilized for this study were four suburban school systems and one urban elementary school located just north of Boston. In total, five public elementary schools were surveyed. Students within the five school systems are assigned enrollment to the elementary schools located within their district based on their home address. The five elementary schools participating in the study are Beach Elementary School, East Side Elementary School, West Side Elementary School, Hanover Elementary School, and Center Street Elementary School. The confidentiality of each school was maintained by the use of generic school names for each school. Most classrooms within all five schools are inclusion classes.

Inclusion classrooms are classrooms where both general education students and students with disabilities learn together (Chamberlin, Kasari, & Rotheram, 2003). Each inclusion classroom has a lead teacher. Some classrooms have an assistant teacher, depending on classroom enrollment and students' needs. Paraprofessionals are assigned as one-on-one aides to assist within the classroom when a student requires their assistance as part of their Individualized Education Plan (IEP). This research study focused on fourteen lead teachers within public elementary inclusion classrooms. For this study, I chose to work with elementary schools located in Massachusetts based on my current working relationship with many school adjustment counselors, since I am social worker with a clinical practice in the area. My current working relationships with the school adjustment counselors assisted me throughout the sampling and data collection process. My relationship with some school members assisted in facilitating the

study throughout the research process since a basic level of trust was already established. According to Creswell (2012) a researcher can decrease bias within a study by being sensitive, respectful, and inclusive. I strived to remain objective by ensuring that that my potential personal bias did not interfere with the research study. I maintained professionalism throughout the course of the study, and made sure to be respectful to the teachers, used inclusive language, did not exclude or offend anyone, and was sensitive to the teachers' thoughts by imagining what it would be like to be in their shoes.

### **Participants**

A contact person was assigned at each of the participating schools. This individual informed all of the 1st, 2nd, 3rd, and/or 4th grade teachers within the school of the upcoming study via the Internet. A recruitment letter was e-mailed to all teachers at each of the five schools. In the letter I introduced myself, informing them of the purpose of the research study, explaining the criteria to participate in the study, and including a link to the online questionnaire. (See Appendix A) Teachers included in the study had varied backgrounds, ethnicities, ages, education levels, and years teaching. The criteria for participation in this research study were that the teacher must:

- Possess a Master's degree in Education or be enrolled in a Master's degree program;
- Have taught 1st, 2nd, 3rd, and/or 4th grade within the public education system for at least two years;
- Be a lead teacher in his or her classroom;

- Have taught at least one student with autism within the past four school years.

The timeline of four years was chosen since I wanted the teacher's viewpoints and beliefs to be based on recent events and situations.

The sample size of fourteen teachers within the five schools provided an in-depth understanding of teachers' feelings towards working with autistic students. The sample size consisted of teachers from each of the four suburban public elementary schools and one urban public elementary school. A sample size of fourteen teachers ensured that information gathered was based on varying viewpoints from teachers with various backgrounds, training, races, ethnicities, and education levels. (See Figure 3.1.) Since an online anonymous survey was sent to all teachers located within the five schools, participating teachers completed the survey based on their willingness to partake in the research study and on their ability to meet the criteria for participation listed above. The survey utilized "skip logics" to eliminate teachers that did not fit the research criteria. Teachers had the right to choose to not participate in the research study at all, and could opt out of the study at any time.

*Figure 3.1: Teacher participation per school*

<b>Name of school</b>	<b>Estimate of Teacher Participants</b>
Beach Elementary School	3-4
East Side Elementary School	3-4
West Side Elementary School	3-4
Center Street Elementary School	3-4
Hanover Elementary School	3-4
<b>Total number of Participants</b>	<b>14</b>

## **Data**

Data was collected from an open-ended sixteen question questionnaire focusing on teachers' perceptions of autistic students. The primary data collection method utilized to gather data on teachers' perceptions of autistic students was Qualtrics, an anonymous online data collection tool. In order to maintain the anonymity of the research participants, I did not have access to the teachers' email addresses or names. The contact person from each school e-mailed the recruitment letter (See Figure 3.2.). Questionnaires were distributed to by each school's contact person to all 1st, 2nd, 3rd, and 4th grade teachers from each of the five participating schools via the Internet. There were "stops" embedded into the survey that screened for eligible participants. If a participant answered a question that did not fit the demographics of the research study, they were disqualified from the survey and were directed to a stop page that stated "thank you for taking the time to start this survey, however, you are not eligible to complete the survey".

A consent form was embedded at the beginning of the online questionnaire. The survey utilized a YES or NO option for the consent form to maintain the anonymity of the participants. Participants checked YES or NO to the following statement: "I have read the consent form and understand the responses are anonymous and I agree to participate in the research study." If the participant clicked YES, they were directed to start the survey. If the participant clicked NO, they were directed to a "stops" page that stated, "Thank you for taking the time to start this survey, however, you are not eligible to complete the survey." The "stops" page then concluded the survey instrument.

The questionnaire gathered both descriptive and qualitative data. Teachers answered a series of sixteen open-ended questions. The purpose of the sixteen open-ended online questions

was to determine teachers' thoughts, feelings, beliefs, training, and understanding of autistic students' needs and diagnosis (see Appendix B). Qualitative data was collected to examine teachers' thoughts, feelings, beliefs, and understanding of autistic students' needs and diagnosis. Questionnaires from teachers that did not fit the participation guidelines were disqualified through a screening process embedded within the survey and were not included in the research study. All qualitative data that fit the criteria listed above was coded for themes using NVivo software. NVivo is an online software program created by QSR International to assist in the analyzing and coding of qualitative data for themes and sub themes. Descriptive statistics analyzed demographic information, length of time teaching, training on autism, and the teacher's exposure to students with autism.

*Figure 3.2: Contact person's role within each school*

<b>Name of school</b>	<b>Contact Person</b>
Beach Elementary School	Assistant Principal
East Side Elementary School	Reading specialist
West Side Elementary School	Principal
Hanover Elementary School	Principal
Center Street Elementary School	Principal

### **Participant Rights**

This study focused on working with the head teachers of the inclusion classrooms within the five participating elementary schools. Teachers included in the study have varied backgrounds, ethnicities, ages, education levels, and years spent teaching. The survey instrument was sent out to all 1st, 2nd, 3rd, and 4th grade teachers at the participating schools; therefore, teacher participation in the study was completely voluntary, since teachers chose on

their own if they wanted to complete the survey. Informed consent was acquired for all study participants. Teachers participated in the research study based on their willingness and eagerness to participate. Institutional Review Board (IRB) permission to conduct the study was granted through the University of New England.

As part of the informed consent process, teachers were informed of measures that would be taken to ensure their confidentiality, and all participants were offered a copy of my resume (See Appendix C and D). Measures to maintain the security of the data source included data that was stored on a secure server, and data was encrypted. The confidentiality of each school's information was maintained by the use of generic school names for each school. In order to maintain the teachers' anonymity, I did not have access to the teachers' names or email addresses; therefore, a contact person at each school e-mailed the recruitment letter and active link to the survey instrument (See Appendix A). All data was stored on a secure device and was encrypted to maintain security and participant confidentiality.

### **Potential Limitations and Biases**

There are several limitations to the study due to the sample size and study's geographical location. Limitations to the study include teachers' honesty while completing the questionnaire, small sample size, and the ability to generalize the findings to other geographic locations. My bias was another limitation of the study. Both my bias and previous experiences due to my experiences with my son are limitations to the study. Despite these limitations, this research study provides educators with pertinent information regarding teachers' perceptions of high functioning students with autism and whether or not their perceptions impact the students' overall achievement. I sought to remain objective so my potential personal bias did not interfere with the research study, and strived to maintain professionalism throughout the course of the

study. I strived to be respectful of the teachers, to use inclusive language, and tried not to exclude or offend anyone. Overall, I was sensitive to the teachers' thoughts by imagining what it would be like to be in their shoes.

### **Conclusion**

Over the past few years, the prevalence rates of autism have increased at an alarming rate. Now more than ever, it is imperative to understand teachers' perceptions of autistic students and its impact on the students' learning environment. The main question being examined was: what impact does a teacher's perceptions of autistic students have on students' learning environment? This study will help school leaders understand teachers' ideologies, feelings, and beliefs that influence their attitudes towards autistic students. Findings and recommendations from the study will enable schools to provide the proper training, support, and tools to their teachers so that they in turn can better understand their feelings towards autistic students and thus provide students with the best possible education.



## **CHAPTER 4**

### **RESULTS**

This study identified teachers' ideologies, feelings, and beliefs that influence their attitudes towards autistic students. It also examined whether teachers perceived that they were provided with the proper training, support, and tools so they can provide students with the best possible education. This study will help school administration and educators gain insight into teachers' ideologies, feelings, and beliefs that influence their attitudes towards autistic students. Recommendations from the study will act as a guide for teacher training and support surrounding their work with ASD students so that they in turn can better understand their feelings towards autistic students and thus provide students with the best possible education.

This research study utilized Qualtrics, an online survey tool, to gather qualitative data from elementary school teachers in five public schools. Data was collected from an open-ended sixteen-question questionnaire about teachers' perceptions of autistic students (See Appendix C). The confidentiality of each school was maintained by the use of generic school names for each school. In order to maintain the teachers' anonymity, I did not have access to the teachers' names or e-mail addresses and a contact person at each school e-mailed the recruitment letter and active link to the survey instrument (See Appendix A). All data was stored on a secure drive and was encrypted to maintain security and participant confidentiality. The survey was distributed to all teachers from five public elementary schools during the summer and fall of 2016. There was a total of fourteen participants who teach grades one through four who completed the on-line survey. The following questions were used to help guide the research:

- How do teachers perceive high functioning autistic students' academic capabilities?

- How does a teacher's training about autism impact the teacher's perception towards a student's academic capabilities?
- How does a teacher's perception towards a student's diagnosis impact teaching strategies?

NVivo was used to organize and code all open-ended survey responses for emergent themes and sub-themes. NVivo is a software program created by QSR International that assists me in the organizing, analyzing, and coding of qualitative data for themes and sub-themes. Coding systems utilized were first cycle and second cycle coding methods. These methods helped me to analyze, organize, and code data for common themes and sub-themes (Saldaña, 2016). First cycle coding methods were important to the analysis process by determining the organization, tone, and quality of the participants' responses. Second cycle coding methods were important to the analysis process by narrowing down the emergent themes and determining their sub-themes. This chapter will discuss in detail the five emergent themes and sub-themes that were discovered through the analysis process of the teachers' responses.

### **Analysis Method**

A recruitment letter was e-mailed to all teachers at each of the five schools. In this recruitment letter I introduced myself, informed the teachers of the purpose of the research study, explained the criteria to participate in the study, and included a link to the on-line questionnaire (See Appendix A). Teachers included in the study had varied backgrounds, ethnicities, ages, education levels, and years teaching. The criteria for this research study were developed based on wanting the research participants to have some level of previous teaching experience, a higher level of education, and some exposure to working with ASD students. The criteria for participation in this research study were that the teacher must:

- Possess a Master's degree in Education or be enrolled in a Master's degree program;
- Have taught 1st, 2nd, 3rd, and/or 4th grade within the public education system for at least two years;
- Be a lead/head teacher in his or her classroom;
- Have taught at least one student with autism within the past four school years.

Questionnaires of teachers that did not fit the survey criteria were not included in the analysis of the data. There were “stops” embedded into the survey that screened for eligible participants. If a participant answered a question that did not fit the demographics of the research study, they were disqualified from the survey and were directed to a stop page that stated “Thank you for taking the time to start this survey, however, you are not eligible to complete the survey.” In order to maintain the teachers’ anonymity, I did not have access to the teachers’ names or email addresses; therefore, a contact person at each school e-mailed the recruitment letter and active link to the survey instrument (See Appendix A). Data from the anonymous surveys were downloaded from Qualtrics into PDF format and analyzed. The data was stored on a secure and encrypted storage drive. Both Qualtrics and NVivo were used in the analysis of the data for this study.

Descriptive statistics including grade level taught, years as an educator, and teachers’ age range were correlated with the use of Qualtrics. NVivo software was utilized to assist me in the organization, analysis, and coding of participants’ answers to the sixteen open-ended survey questions. The data was analyzed utilizing first and second cycle methods. Coding methodologies were chosen based on their ability to best organize and analyze the data into appropriate themes and sub-themes (Saldaña, 2016).

According to Saldaña (2016), first cycle coding methods assist me in the organization and understanding of emergent themes throughout data. First cycle coding methods utilized throughout the data analysis were Attribute, Magnitude, and In Vivo methodologies. Attribute coding methods were utilized in order to highlight, organize, and understand basic descriptive characteristics of interest throughout the participants' responses. Magnitude coding methods were utilized in order to assist me in determining the frequency and intensity of participants' responses (Saldaña, 2016). In Vivo coding methods were used to highlight and code actual participant phrases through their responses. During first cycle coding methods, the interpretations of emergent themes were categorized by question. Second cycle coding methods were conducted to organize the data for word frequencies; trends in ideas found throughout survey questions; develop a deeper understanding of emergent themes and their sub-themes; and determine the data's connection to the research questions (Saldaña, 2016).

According to Saldaña (2016), second cycle coding is an advanced method coding that focuses on the re-organizing and re-analyzing of first cycle coded data. Second cycle coding methods assisted me in the narrowing of themes and their connected sub-themes. The second cycle method used was focus coding. Focus coding was chosen due to its usefulness in coding data based on thematic and conceptual similarities. This approach assisted me in developing a deeper understanding of the emergent themes and sub-themes found throughout all of the data. These emergent themes and sub-themes were then re-organized and categorized together based on commonalities. These emergent themes and sub-themes were then analyzed to determine their implications on the research questions (Saldaña, 2016).

NVivo queries were instrumental in determining themes and sub-themes. The first query run was a word frequency query. The word frequency query was run through NVivo in order to

determine trends in wording. This query helped examine common trends and prevalence rates within the language used by the participants. Some of the most frequently used words noted through the word frequency query included *student, well, classroom, support, autism, time, teacher, and work*. (see Figure 4.1).

*Figure 4.1: Top twenty most frequently used words*

<b>Word</b>	<b>Frequency</b>	<b>Percentage</b>	<b>Similar words</b>
Student	51	4.39%	Student, students
Successful	25	2.15%	Successful, success
Well	19	1.72%	Well
Needs	16	1.63%	Need, needs, needed
Support	16	1.38%	Support, supported, supports
Time	15	1.29%	Time, times
Autism	15	1.29%	Autism
Teachers	15	1.29%	Teacher, teachers
Work	15	1.29%	Work, worked, working
Helping	14	1.18%	Help, helping, helps
Social	14	1.20%	Social, socialize, socially
Academic	13	1.12%	Academic, academically
Challenge	13	1.12%	Challenge, challenges, challenging
Understanding	11	0.95%	Understand, understanding
Meeting	10	0.86%	Meet, meeting, meetings
Training	9	0.77%	Train, trained
Always	8	0.69%	Always
Good	8	0.69%	Good
Many	8	0.69%	Many
Behaviors	7	0.60%	Behavior, behaviors

The second query utilized was a word cloud query. A word cloud was created with the use of NVivo. The word cloud was created to observe word trends found throughout the data. I utilized the word cloud as a visual representation of these trends. Some of the most prominent words displayed in the word cloud are students, need, support, challenging, time, successful, and understanding (see Figure 4.2).



taught in a variety of grade levels. One taught in a kindergarten classroom; three taught in a 1st grade classroom; five taught in a 2nd grade classroom; four taught in a 3rd grade classroom; zero taught in a 4th grade classroom; and one taught in a 3rd-5th grade inclusion classroom. There were differences in the number of years the teachers have taught. One of the teachers has taught for two to five years; three of the teachers have taught for five to ten years; and ten of the teachers have taught for more than ten years. Teachers varied in age from twenty to over fifty-six years old. Five of teachers were twenty to thirty-five years old; two were thirty-six to forty-five years old; four were forty-six to fifty-five years old; and three were over fifty-six years old (see Figure 4.3). Three participants reported having a family member or someone they knew diagnosed with autism, while eleven participants reported not having a family member or someone they knew diagnosed with autism. The relationships of the participants to the individuals diagnosed with autism varied, and were listed as a friend, aunt, and cousin.

Figure 4.3 Participating teacher statistics

	Number of participants	Percentage
<i>Gender:</i>		
Male	0	0%
Female	14	100%
Total:	14	100%
<i>Grade level taught:</i>		
Kindergarten	1	7%
1st grade	3	21%
2nd grade	5	36%
3rd grade	4	29%
4th grade	0	0%
3-5 inclusion classroom	1	7%
Total:	14	100%
<i>Years as an educator:</i>		
2-5 years	1	7%
5-10 years	3	21%
10+ years	10	72%
Total:	14	100%
<i>Teachers' age range:</i>		
20-35 years old	5	36%
36-45 years old	2	14%
46-55 years old	4	29%
Over 56 years old	3	21%
Total:	14	100%

### Emerging Themes

After conducting a detailed analysis of the fourteen participants' responses to the sixteen questions included in the online questionnaire, themes and sub-themes emerged about teachers' perceptions of students with autism and the impact those perceptions had on learning environment. This data addressed current gaps in research by answering the following questions:

- How do teachers perceive high functioning autistic students' academic capabilities?



- How does a teacher's training about autism impact the teacher's perception toward a student's academic capabilities?
- How does a teacher's perception towards a student's diagnosis impact teaching strategies?

The five main themes that were derived from the participants' responses are 1) enriching experiences, 2) classroom challenges, 3) preparedness and knowledge, 4) accommodations, and 5) needed resources. Secondary coding revealed sub-themes for each of the five main emergent themes. The seven sub-themes for enriching experiences are: teaches empathy, teaches compassion, teaches tolerance, teaches flexibility, understanding differences, creates leaders, and increases teaching skills. The four sub-themes for classroom challenges are behavioral issues, time commitment, lack of training, and functioning level. The three sub-themes for teacher preparedness and knowledge are lack of preparation, lack of training, and lack of time. The three sub-themes for accommodations are workload modifications, organizational skills, and classroom arrangement. The four sub-themes for needed resources are training, collaboration, schedule accommodation, and support (See Figure 4.4). Each emergent theme and their correlating sub-themes will be defined and explained in the following section.

*Figure 4.4: Emergent themes and their sub-themes*

Emergent Theme	Subthemes
Enriching experiences	Teaches compassion Teaches empathy Teaches tolerance Teaches flexibility Understanding differences Creates leaders Increases teaching skills
Classroom challenges	Behavioral issues Time commitment Lack of training Functioning level
Preparedness and knowledge	Lack of preparation Lack of training Lack of time
Accommodations	Workload modifications Organizational skills Classroom arrangement
Needed resources	Training Collaboration Schedule accommodation Support

Each one of the emergent themes is important to the research by providing me with an in-depth understanding of teachers' perceptions of ASD students and their impact on learning environment. The theme of enriching experiences was important to the research since it helped me to better understand teachers' perceptions of how ASD students enhance the classroom. The theme of classroom challenges was important to the research since it helped the me to better understand challenges teachers face with the incorporation of ASD students into their classrooms. The theme of preparedness and knowledge was important to the research since it identified the ways a teacher's preparation, training, and teaching schedule impacts their work with ASD students. The theme of accommodations was important to the research since it identified teachers' perceptions of ASD students' academic capabilities and the ways a teacher alters his or her teaching strategies and lesson plans to support ASD students. The theme of

needed resources was important to the research since it identified that a teacher's need for support, collaboration, and training impacts his or her work with ASD students. Each of these themes and sub-themes provided valuable information to best answer the three research questions (see Figure 4.5).

*Figure 4.5: Research questions connections to emergent themes*

<b>Research Question</b>	<b>Emergent Themes</b>
1) How do teachers perceive high functioning autistic students' academic capabilities?	Enriching experiences Classroom challenges
2) How does a teacher's training about autism impact the teacher's perception toward a student's academic capabilities?	Preparedness and knowledge Needed resources
3) How does a teacher's perception towards a student's diagnosis impact teaching strategies?	Accommodations

### **Emergent Theme One: Enriching Experiences**

While reviewing the data, participant responses uncovered an emergent theme of enriching experiences. Enriching experience is defined as a teacher's positive feelings towards the integration of ASD students and how it enhances his or her classroom (Merriam-Webster, 2016). All fourteen participants discussed the benefits of having an ASD student within their classroom and the positive ways it impacts the students and the class environment. The theme of enriching experience addressed research question one: How do teachers perceive high functioning autistic students' academic capabilities? Sub-themes for enriching experiences are that the incorporation of ASD students within a classroom 1) teaches empathy, 2) compassion, 3) tolerance, 4) flexibility, 5) understanding differences, 6) creates leaders, and 7) increases teaching skills.

Overall, the majority of the participants indicated that the incorporation of ASD students within their classroom enriched the classroom experience for both non-ASD students and the teacher. One participant stated, "Benefits the whole class as it provides a sense of class community." Another participant stated that the incorporation of ASD students helps to enhance

the classroom experience by “teaching students lessons that cannot be learned from a book.”

Overall, teachers felt that having ASD students in their classroom adds a great dynamic to the classroom. This finding suggests that teachers have favorable feelings about the inclusion of ASD students within their classroom and that they believe it enhances the classroom experience.

***Sub-theme one: Teaches compassion.*** The sub-theme of teaches compassion was discovered through the analysis of the data surrounding the theme of enriching experience. Compassion is defined as the teacher’s or student’s desire to help someone else who is struggling (Merriam-Webster, 2016). Teaching compassion was the most frequently discussed sub-theme by research participants. One participant stated, “Teaching tolerance, respect, understanding differences, compassion, and perseverance.” Numerous participants discussed that their non-ASD students develop compassion towards ASD students and their differences by “being kind and helping out.” Another participant stated, “My students were accepting, compassionate, caring, ‘Bucket filling’, and wonderful little classroom citizens. They all played and worked together, even when the road was a little bumpy.” Another participant stated that ASD students assisted non-ASD students by “Teaching tolerance, respect, understanding differences, compassion.”

This data suggest that participants believe that the incorporation of ASD students into their classroom benefits ASD students, teachers, and non-ASD students. The data also suggests that participants believe that it helps to teach students how to care for one another, a lesson the students cannot learn from a book. This finding aligns with previously conducted research conducted by Sansosti and Sansosti (2012) who determined that teachers viewed inclusion positively because it improves the academic social environment for the entire class.

***Sub-theme two: Teaches empathy.*** The sub-theme of teaches empathy was discovered through the analysis of the data surrounding the theme of enriching experience. Empathy is defined as the teacher or student's ability to understand someone else's experience (Merriam-Webster, 2016). Teaching empathy was a frequently discussed sub-theme by the research participants. Numerous participants discussed how the incorporation of ASD students within their classroom helped students to learn empathy for others students. One participant stated, "It created empathy and understanding in the model students." Participants also described their non-ASD students becoming empathetic towards ASD students' differences by "Being kind and helping out the students with autism."

The data suggest that teachers believe that the incorporation of ASD students into their classroom benefits non-ASD students by helping them to understand someone else's experience. The data also suggest that teachers believe that it helped to teach non-ASD students how to be kind towards ASD students' differences. This finding aligns with previously conducted research conducted by Sansosti and Sansosti (2012) who determined that teachers viewed inclusion positively because it improves the learning environment for the entire class.

***Sub-theme three: Teaches tolerance.*** The sub-theme of teaches tolerance was discovered through the analysis of the data surrounding the theme of enriching experience. Tolerance is defined as the teacher or student's ability to endure challenges that arise within the classroom (Merriam-Webster, 2016). Many participants discussed how the incorporation of ASD students within their classroom helps students to learn how to be tolerant of other students' differences. One participant stated that she believes the incorporation of ASD students into the classroom helps "Students learn tolerance and acceptance that 'we are all alike...we are all

different.’’ Another participant stated that ASD students assisted non-ASD students by “teaching tolerance, respect, understanding differences, compassion.”

The data suggest that participants believe that the incorporation of ASD students into their classroom benefits ASD students, teachers, and non-ASD students by teaching them to be tolerance of each other’s differences. The data also suggest that participants believe that it helps teacher and students endure challenges that may arise because of these differences within the classroom. This finding aligns with previously conducted research conducted by Sansosti and Sansosti (2012), who determined that teachers viewed inclusion positively because it improves the learning environment for the entire class.

***Sub-theme four: Teaches flexibility.*** The sub-theme of teaches flexibility was discovered through the analysis of the data surrounding the theme of enriching experience. Flexibility is defined as the teacher or student’s ability to change or try new things (Merriam-Webster, 2016). Many research participants discussed how the incorporation of ASD students within their classroom teaches everyone in the class to become more flexible. One participant stated, “It has taught me to be a more flexible teacher.” Participants discussed that the presence of ASD students within their classroom helps to teach non-ASD students and teachers to be more flexible since ASD students’ behavioral issues can sometimes impact the lesson plans and classroom schedule. One participant stated, “Sometimes there are outbursts and that impacts the entire class.” Participants stated that having a student with ASD within their classroom taught them to be more flexible in their teaching approach. Participants discussed the importance of needing to be flexible in lesson panning since every “child and every day can be different” based on the student’s needs and level of functioning.

The data suggest that participants believe that the incorporation of ASD students into their classroom benefits ASD students, teachers, and non-ASD students by learning how to become flexible. The data also suggest that participants believe that it helps teachers or students change or try new things within the classroom in order to best support ASD students' needs. This finding aligns with previously conducted research conducted by Sansosti and Sansosti (2012) who determined that teachers viewed inclusion positively because it improves the learning environment for the entire class.

***Sub-theme five: Understanding differences.*** Another prevalent sub-theme that emerged throughout the analysis of the data surrounding how ASD students enrich the classroom experience was by helping teachers and students to understand differences. Understanding of differences is defined as the teacher's or student's ability to comprehend that not all individuals are the same (Merriam-Webster, 2016). Participants felt that having a student with autism in their class helped both the teachers and the students understand differences by exposing them to unique situations they may not encounter in a non-inclusion classroom. One participant stated she had, "More understanding of the unique needs of the students."

Overall, many participants felt that having ASD students in their classroom adds "a great dynamic to the classroom." This classroom dynamic creates a positive learning experience that both ASD and non-ASD students benefit from by "learning life lessons." One participant stated that having an ASD student in their classroom assisted the class dynamic by "having all students understand differences." Participants believed that having ASD students within their classroom helped students learn skills that they would use outside of the classroom by "preparing students for life outside of school."

The data suggest that participants believe that the incorporation of ASD students into their classroom benefits ASD students, teachers, and non-ASD students. The data also suggest that participants believe that it helps teachers and students to comprehend that not all individuals are the same. This finding aligns with previously conducted research conducted by Sansosti and Sansosti (2012), who determined that teachers viewed inclusion positively because it improves the learning environment for the entire class.

***Sub-theme six: Creates leaders.*** A common sub-theme that emerged on how ASD students enhance the classroom experience is by creating leaders. Creates leaders is defined as a student's ability to become a leader within the classroom (Merriam-Webster, 2016). The lessons learned from having an ASD student within the classroom enhance the overall experience of the classroom and help to teach students to become leaders. One participant stated that having ASD students within the classroom "Helps students become leaders." Another teacher stated that it, "Benefits the whole class as it provides a sense of class community and builds upon working together and accepting differences in others." Through examining the data a common theme emerged in which participants saw students become leaders in the classroom by supporting ASD students. One participant stated, "The other students have been very helpful this year in being kind and helping out the students with autism."

The data suggest that participants believe that the incorporation of ASD students into their classroom benefits ASD students, teachers, and non-ASD students by creating leadership in the classroom. This finding aligns with previously conducted research conducted by Sansosti and Sansosti (2012) who determined that teachers viewed inclusion positively because it improves the learning environment for the entire class. The data also suggest that participants believe that the incorporation of ASD students into their class also helps students to become



leaders by helping ASD learn social skills. This finding aligns with previously conducted research conducted by Sansosti and Sansosti (2012) also determined that many teachers believed that inclusion classrooms are necessary and important to autistic students' development of social skills by forcing them into daily age-appropriate social situations.

***Sub-theme seven: Increases teaching skills.*** Another common sub-theme that emerged from the analysis of the data was that ASD students enhance the classroom experience is by increasing teaching skills. Increases teaching skills are defined as a teacher's ability to learn and implement new teaching strategies (Merriam-Webster, 2016). Examination of the data revealed that participants stated that having a student with ASD in their classroom helped to increase their teaching skills. Participants' felt that this increased their teaching skills, which in turn, made them better educators. One participant stated, "ASD students help me to become a better teacher and person." Frequently participants discussed that they bettered their teaching skills through the lessons they learned by interacting with their ASD students. One participant stated that, "Challenge your creativity in ensuring their educational success."

The most frequently discussed ways that ASD students impacted participants was by teaching them to become more flexible, compassionate, and empathetic in their teaching style. Participants felt that having an ASD student in their classroom improved their teaching skills since they must learn new teaching strategies that focus on a student's challenges and strengths. One participant stated, "Teaching ASD students helps teachers to discover new teaching approaches in order to best support students with challenges." Participants discussed how each child is different and that educators must be flexible to ensure that they meet the unique needs of each student. One participant stated, "You learn something new each time and like regular

education students, each one has their own individual uniqueness and what worked with one autistic child doesn't always work with the next.”

Participants felt that teaching ASD students is a way for them to improve their ability to teach all students, not just ASD students. One participant stated, “I always see it as a great learning experience that will improve my teaching of all students.” Participants felt that these new teaching skills benefit their ways to interact and teach all children. Another teacher stated, “I love learning new ways that I can teach children information.” Overall, participants felt that this is an opportunity of growth for educators to become better teachers, and also helps students to become better leaders by enhancing the classroom dynamic.

The data suggest that participants believe that the incorporation of ASD students into their classroom benefits ASD students, teachers, and non-ASD students. The data also suggest that participants believe that it helps increase a teacher’s ability to learn and implement new teaching strategies. This finding aligns with previously conducted research conducted by Sansosti and Sansosti (2012) who determined that teachers viewed inclusion positively because it improves the learning environment for the entire class.

### **Emergent Theme Two: Classroom Challenges**

Despite that fact that teachers felt that the inclusion of ASD students enhances the classroom experience, examination of the data uncovered a theme of many challenges when an ASD student is integrated into a classroom. Classroom challenges are defined as difficulties that occur due to the inclusion of ASD students within the class (Merriam-Webster, 2016). There were four prevalent sub-themes surrounding the challenges of having an ASD student within a classroom. Challenges based on participants’ responses were 1) behavioral issues, 2) time commitment, 3) lack of training, and 4) functioning level. All of these factors led to

teachers feeling overwhelmed and overworked and feeling unsuccessful in their work with ASD students.

***Sub-theme one: Behavioral issues.*** Participants stated that it was challenging to have ASD students within their classroom due to potential behavioral issues. Behavioral issues are defined as a student's actions within the classroom that are destructive, intense, or aggressive (Merriam-Webster, 2016). Participants identified disruptive and violent behaviors by ASD students as one factor having the largest impact on non-ASD students, and that such behavior could potentially be very distracting to their students.

Behavioral issues such as disruptive behaviors, outbursts, meltdowns, and violent behaviors were identified as major classroom challenges. These were oftentimes noted by participants as one of the most common influences on ASD students' academic success. One participant stated that the inclusion of ASD students was, "challenging because the behaviors of the students would often interfere with their academic success." Participants felt that these could distract other students within the classroom and impact their potential academic success. One participant stated, "Outbursts and meltdowns impact the entire class." Another participant stated, "The rights of our regular education students are violated when they are continuously exposed to disruptive and violent ASD students."

Participants were also concerned with the emotional impact these outbursts have on the other children the class. One participant stated, "Violent and emotional outbursts were upsetting to all students, and the children could not understand why we had to leave our classroom while their peer was unable to control him/herself." The majority of participants identified potential behavioral and disruptive behaviors as the largest classroom challenge they face with the inclusion of ASD students aligns with previously conducted research.

The data suggest that participants believe that the incorporation of ASD students into their classroom is challenging for teachers and non-ASD students. The data also suggests that participants believe that challenging behaviors are related to student's lower level of functioning and learning environment. This finding aligns with previously conducted research by Crosland and Dunlap (2012), who discovered that educators identified potential behavioral problems and disruptive behaviors as the biggest challenge they face in teaching ASD students. A study conducted by Sansosti and Sansosti (2012) found that teachers identified concerns with behavioral problems and disruptive behaviors and their potential impact on the learning, safety, and well-being of the other students.

***Sub-theme two: Time commitment.*** The increase in time commitment when working with ASD students was identified as a major challenge for most teachers. Time commitment is defined as the amount of time a teacher spend preparing lesson plans and in team meetings (Merriam-Webster, 2016). Participants identified that this increase in time commitment placed a higher demand on them due to the increase in team meetings and lesson planning. Increased need for lesson planning is defined as a teacher's desire to have more time allotted to prepare for class activities. One participant stated the need for "more planning time." Many participants stated the need for more time to lesson plan in order to best meet the academic needs of their students. One participant stated a need for, "time set aside to modify instruction and locate content that fits their academic and cognitive abilities." This lack of time caused many participants to feel overwhelmed in their work with ASD students.

Another challenge identified by participants in the incorporation of ASD students within their classroom was not having enough time for service provider meetings. One participant stated, "Additional data collection, meetings, and time out of classroom were challenging." The

need for more meetings with service providers to get everyone on the same page in order to best support the academic and social needs of ASD students was noted by participants. One participant stated needing more team meetings since, “we had to co-plan lessons with multiple levels of modifications.”

The data suggest that participants believe that the incorporation of ASD students into their classroom increases their time commitment outside of the scheduled school day. The data suggest that a participant’s increase in time commitment is due to the increased demand for team meetings and lesson planning. Previously conducted research has not discussed teachers’ beliefs surrounding a teacher’s increase in time commitment is due to the increased demand for team meetings and lesson planning. However, teachers could feel this way based on their lack of training and knowledge about ASD. Previous research discussed that a lack of training, resources, and preparedness causes major challenges for both the student and teacher (Horrocks, White, & Roberts, 2008).

***Sub-theme three: Lack of training.*** Another sub-theme discussed by almost all participants as a challenge was their lack of training about ASD. Lack of training is defined as a teacher’s need for more professional development workshops and continuing education about ASD (Merriam-Webster, 2016). Participants identified that this lack of training about ASD was a major hurdle in their ability to properly implement teaching strategies in an effective and timely manner. Many participants simply stated that they need, “more training.” One participant discussed that they have had a little bit of training on ASD, but one, “can always get more training in many areas for all special needs kids.” Many participants discussed that learning how to work with ASD students through on-the-job training and are lacking formal training. One participant stated, “We gained training on the job - a little more training, prior to the arrival of

the students, would have been nice.” Participants believed that to best meet the academic and social needs of ASD students, they needed expansive and ongoing training on ASD.

Participants stated that their lack of training about the responsive classroom approach and “zone” approach to emotional regulation interfered with their ability to properly support ASD students. Another participant stated, “I teach responsive classroom and last year I saw a great improvement from all students with social skills and an awareness of others and understanding differences, but lack proper training on it.” It is challenging to ensure that they are best meeting the academic and social needs of autistic students, especially when they feel that they are lacking in training on best practices for teaching autistic students. This causes many challenges for educators to feel as if they are improperly implementing academic and social strategies and are under prepared to meet ASD students’ academic and social needs.

The data suggest that participants believe that the incorporation of ASD students into their classroom is challenging based on their lack of training on ASD. Horrocks, White, & Roberts (2008) found that lack of training and knowledge identified by teachers is the largest challenge they face and is the main source of resistance for many educators about inclusion classrooms. Sansosti and Sansosti (2012) also found that more than half of the teachers teaching in inclusion classrooms feel that they need more training about the autism diagnosis.

***Sub-theme four: Functioning level.*** A common sub-theme present surrounding classroom challenges was a student’s level of functioning. Low level of functioning is defined as a student emotionally and socially not meeting the standard for their age range (Merriam-Webster, 2016). Participants believed that a student’s level of functioning directly impacts their academic capabilities and performance. Participants identified that challenges occur when a student’s level of functioning impacts their ability to academically perform at grade level.

A student academically performing lower than grade level is defined as a student not meeting the educational standards for his or her age range. Teachers identified that success in the classroom varied based on the child's level of functioning and his or her ability to academically perform. One participant described a “struggle trying to come up with the right accommodations.” Participants frequently referred to struggling students with the following descriptions: “below grade level,” “have lower academic functioning,” “need easier assignments,” and “struggle academically.” These challenges caused teachers to feel overwhelmed and less successful in meeting the needs of their students.

Participants felt that a teacher’s success depended upon a student’s level of functioning since this level of functioning is directly related to his or her level of academic performance. Educators stated that if a student has a decrease in functioning he or she will, “have challenges with accessing the material.” and will perform lower academically. This lower level of academic performance increases the teacher’s feeling of overwhelm, which in turn causes the teacher to feel less successful in their work with ASD students. One participant stated that, “adapting the curriculum to fit their cognitive abilities was challenging.” Participants discussed the challenges they face in properly meeting the academic needs of ASD students based on their lower level of functioning. One participant stated that, “other times it was a struggle trying to come up with the right accommodations.” Participants also identified that a student’s lower level of functioning and academic capabilities required an increase in time spent on lesson planning and team meeting outside of the classroom. This in turn caused many teachers to feel underprepared to meet the needs of ASD students.

The data suggest that participants believe that the incorporation of ASD students into their classroom is challenging. The data suggest that participants believe that if a student is not

emotionally and socially meeting the standard for their age range, it is challenging to have them in their class. This finding aligns with previously conducted research. Prior to the regular inclusion of students with autism, teachers tended to have a more negative attitude towards autism. More recent research demonstrated that educators have positive attitudes towards students with autism (Park & Chitiyo, 2011). Previously conducted research demonstrated that teachers' attitudes and beliefs could influence how they feel about students and their level of expectations. These beliefs and expectations can influence a student's self-image and academic performance (Park & Chitiyo, 2011).

### **Emergent Theme Three: Preparedness and Knowledge**

Participant responses uncovered the third common theme of teachers' preparedness and knowledge. Preparedness and knowledge is defined as a teacher's feeling ready to meet the needs of ASD students and their capacity to identify these needs (Merriam-Webster, 2016). Prevalent themes and sub-themes were determined about teacher's preparedness and knowledge based on participants' responses. Sub-themes present in teachers' responses about their preparedness and knowledge were 1) lack of preparation, 2) lack of training, and 3) lack of time.

***Sub-theme one: Lack of preparation.*** Participants identified lack of preparation as a sub-theme in their preparedness and knowledge surrounding ASD students. Lack of preparedness is defined as a teacher's feeling as if he or she is not ready to meet the needs of ASD students (Merriam-Webster, 2016). Not feeling fully prepared to meet ASD students' needs was one of the most frequently described challenges noted by participants in their ability to best meet the academic and social needs of ASD students. Most participants stated that they were unaware of the hours of extra work it would take for them to work with ASD students. One participant stated, "You need to know the zones of regulations, be prepared for hours of



collaboration of the team in order to meet all of the social/emotional, academic needs.”

Participants felt as if they were not adequately prepared to properly meet the academic and social needs of ASD students. One participant stated, “I have worked with many students of autism, but the amount of needs in my room this year is something I was not prepared for.” Participants identified not feeling prepared since they “do not have enough time to collaborate with other service providers,” or to “modify their lesson plans” to meet ASD students’ academic needs.

Participants discussed that their lack of preparedness and knowledge directly impacted their success in meeting the needs of ASD students. Participants felt successful in meeting ASD social needs, but only felt somewhat successful to not successful in meeting their academic needs. The data suggest that participants believe that they are not fully prepared for the incorporation of ASD students into their classroom. The data also suggest that participants believe that teachers do not feel ready to meet the needs of ASD students. Previous research conducted by Harrocks, White, & Roberts (2008) determined that in order for inclusion to be successful, teachers must understand autism and be prepared to respond to the behavioral manifestations of the disorder while meeting the complex social and academic needs of the students. Positive organizational environments are created by having a supportive school leader, funding for resources, training, data-based decision making, and team decision making in place (Crosland & Dunlap, 2012).

***Sub-theme two: Lack of training.*** Participants identified lack of training as a sub-theme in their preparedness and knowledge surrounding ASD students. Lack of training is defined as a teacher’s feeling that he or she needs more professional development workshops and continuing education about ASD (Merriam-Webster, 2016). Participants identified lack of training as a

major influence on their ability to feel prepared and knowledgeable, and to properly and effectively respond to the academic and social needs of ASD students.

One participant stated that in their classroom, the “number of ASD students is much higher and teachers do not have specialized training.” Teachers stated that using a responsive classroom model yielded the “most success with meeting the social needs of ASD students,” but that they “have not received nearly enough training around how to properly implement its strategies.” Participants discussed the importance of the use of the “zone” approach within the classroom as a helpful tool in teaching students with ASD. One participant stated, “I wish I had more “zone” background and training prior to teaching students with autism.” Overall, every participant in the study stated that they need more training on how to properly implement teaching strategies for ASD in order to feel fully prepared and knowledgeable in their work with ASD students.

The data suggest that participants believe that they are not fully prepared for the incorporation of ASD students into their classroom and that they need more training. Participants feeling as if they need more formal training aligns with previously conducted research. Horrocks, White, & Roberts (2008) found that lack of training and knowledge identified by teachers is the largest challenge they face and is the main source of resistance for many educators surrounding inclusion classrooms. Sansosti and Sansosti (2012) also found that more than half of the teachers teaching in inclusion classrooms feel that they need more training about the autism diagnosis.

***Sub-theme three: Lack of time.*** Participants identified lack of time as a sub-theme in their preparedness and knowledge about ASD students. Lack of time is defined as a teacher’s desire to have more time to lesson plan, attend team meetings, and collaborate with the team

(Merriam-Webster, 2016). Most participants described that they lacked time to collaborate with the team and to lesson plan. This lack of collaboration and lesson planning causes them to feel inadequately prepared to support the academic and social needs of ASD students. One participant stated needing, “hours of collaboration of the team in order to meet all of the social/emotional, academic needs.” Participants state that this lack of time made teaching students with ASD feel overwhelming and challenging, and made them feel like less successful teachers. One participant stated, “I am not as successful meeting the academic needs of these students as I would be with more time for support.” Another participant stated, “With time for supports in place, I feel successful.”

Many participants stated that they need much more time set aside throughout the day in order to lesson plan and modify teaching instructions. One participant stated that she needs “time set aside to modify instruction and locate content that fits their academic and cognitive abilities.” Even though participants felt they were not properly prepared or trained to meet the needs of ASD students, they reported being very accommodating in attempting to meet their social and academic needs.

The data suggest that participants believe that the incorporation of ASD students into their classroom increases their time commitment outside of the scheduled school day. The data suggest that a participant’s increase in time commitment is due to the increased demand for team meetings and lesson planning. Previously conducted research has not discussed teachers’ beliefs surrounding a teacher’s increase in time commitment is due to the increase demand for team meetings and lesson planning. However, teachers could feel this way based on their lack of training and knowledge surrounding ASD. Previous research discussed that a lack of training,

resources, and preparedness causes major challenges for both the student and teacher (Horrocks, White, & Roberts, 2008; Busby, et al., 2012).

#### **Emergent Theme Four: Accommodations**

The fourth major theme that emerged from the data was that teachers are accommodating and attempting to meet the academic and social needs of ASD students by modifying class work. Accommodations are defined as a teacher's ability to provide students with what they need in order to succeed socially and academically (Merriam-Webster, 2016). Participant responses demonstrated that teachers go above and beyond to meet the needs of ASD students despite feeling that they lack training, collaboration time, and preparedness. Prevalent sub-themes were determined through examining the data on how teachers are accommodating based on participants' responses. One participant reported, "modifying classroom work to meet all the different learning styles of my students with autism." Sub-themes present in how teachers are accommodating are 1) workload modifications changes, 2) organizational skills, and 3) classroom arrangement.

***Sub-theme one: Workload modifications.*** Participants identified workload modifications as a sub-theme in the way they accommodate ASD students' social and academic needs. Workload modifications are defined as shifts in a lesson plan to meet the specific needs of a student (Merriam-Webster, 2016). Every single participant reported that they modify the workload for ASD students, and that they take into account a student's diagnosis when creating and implementing lesson plans and teaching strategies. One participant described modifying the ASD student's workload with the use of, "Differentiated activities to meet the student's needs." One participant reported, "Homework expectations and assignments are modified." While

another participant stated, “Homework expectations and assignments are modified or given alternative assignments.”

Participants reported that the reason for shifting lesson plans based on a student’s diagnosis was so they could best accommodate the student’s social and academic needs. Participants discussed that they would “assign less work” and “modify workload” for students with autism based on academic capabilities. Most participants discussed creating these workload modifications as a way to decrease a student’s level of frustration. One participant stated, “I think of modifications that they will be able to access it and demonstrate an understanding of without being overwhelmed.” Participants also stated modifying workloads based on each student’s decrease in functioning and lower level of academic capabilities. Common ways identified by participants in how teachers would modify an ASD student’s workload is by including “step-by-step directions,” “assignment are more direct,” “simpler tasks,” and “use of alternative and/or simplified assignments.”

These modifications were oftentimes based on the recommendation of a student’s Individualized Education Plan (IEP) and teacher’s observations within the classroom. An IEP is a document created by a teacher, parents, school administrators, related services personnel, and students, if appropriate, to improve educational results for a student with disabilities. An IEP provides a detailed plan of educational needs for a specific student receiving special educational services (Merriam-Webster, 2016). Participants stated utilizing the recommendations of a student’s IEP as a way to determine how to shift the ASD student’s lesson plans and teaching strategies. One participant stated shifting lesson plans and strategies, “based off of a student’s IEP.” Another participant referred to utilizing strategies recommended in a student’s IEP, but also felt it was “not always representative of what a student is not capable of.” Participants felt

that a student's IEP did not always reflect their needs, academic abilities, and social functioning. Participants stated that an ASD student's needs could shift from day-to-day and year-to-year. Therefore, teachers would also base shifts in teaching strategies on their "own observations of the student within the classroom." Overall, participants reported workload modifications for ASD students in order to decrease the students' frustration while meeting their academic and social needs.

The data suggest that participants believe that it is important to shift in a lesson plan in order to meet the specific academic and social needs of a student. The data suggest that participants implement workload modifications for ASD students in order to decrease the students' frustration while meeting their academic and social needs. Previous research conducted by Harrocks, White, & Roberts (2008) determined that in order for inclusion to be successful, teachers must understand autism and be prepared to respond to the behavioral manifestations of the disorder while meeting the complex social and academic needs of the students.

***Sub-theme two: Organizational skills.*** Participants identified organizational skills as another sub-theme in the way they are accommodating to ASD students' social and academic needs. Organizational skills are defined as a student's ability to access and organize classroom content (Merriam-Webster, 2016). Participants discussed the implementation of a variety of strategies in order to decrease a student's frustration in the classroom, while helping them to become more organized in their work. Participants identified that some of the main challenges ASD students face in the classroom were difficulties with organizational skills.

Many participants discussed how ASD students struggle to organize their work, which at times can cause them frustration. One participant reported assisting students with "Accessing

material and demonstrate an understanding of it without being overwhelmed.” Participants reported, “The goal was always to lessen the frustration.” Participants stated that they would accommodate ASD students’ organizational needs in order to decrease frustration by “decreasing the student’s workload,” “assigning easier assignments,” and “assist with student’s organizational skills.” Many participants discussed the utilization of organizational strategies that are more direct and focused as a way to increase the organization of ASD students. Some approaches participants discussed were through the use of written lists such as, “Provide written instructions” and “Provide student with a material lists for assignments.” Participants also discussed some of the following teaching strategies to help increase organizational skills while decrease student frustration and overwhelm by including “Hands-on lessons,” “Multi-tactile strategies,” “Movement breaks,” and “zone emotional regulations activities.”

The data suggest that participants believe that it is important to assist students with their organizational skills. The data also suggest that participants implement accommodations for ASD students in order to decrease the students’ frustration while attempting to meet their academic and social needs. Overall, the data suggest that participants implement many modifications in their teaching and organizational strategies to best support ASD students. Previous research conducted by Harrocks, White, & Roberts (2008) determined that in order for inclusion to be successful, teachers must understand autism and be prepared to respond to the behavioral manifestations of the disorder while meeting the complex social and academic needs of the students. General education classrooms are also beneficial because they provide autistic students with a more rigorous, demanding, and grade-level educational experience (Chamberlin, Kasari, & Rotheram, 2003; Sansosti & Sansosti, 2012).

***Sub-theme three: Classroom arrangement.*** Participants identified their classroom arrangement as a sub-theme in the way they are accommodating to ASD students' social and academic needs. Classroom arrangement is defined as when a teacher changes the seating arrangement and classroom set-up in order to best meet the academic and social needs of the ASD student (Merriam-Webster, 2016). One participant stated taking into account the room set-up by creating "A space for the children to calm down if needed." Participants stated that they would base their room set-up based on a student's IEP and their observations. While another participant stated, "I tend to look more at a student's IEP, and my own observations rather than their diagnosis when planning lessons, the room set up, they daily schedule." Participants stated that the noise level of the classroom was one of the largest challenges many ASD students faces. Therefore, participants reported creating a safe and comfortable zone for students. Even though teachers are very accommodating at attempting to meet the needs of ASD students, they reported that there they are lacking the resources they need to fully feel successful in meeting the academic and social needs of ASD students.

The data suggest that participants believe that it is important for teachers to shift the seating arrangement and room set-up in order to best meet the academic and social needs of the ASD student. Previous research conducted by Harrocks, White, & Roberts (2008) determined that in order for inclusion to be successful, teachers must understand autism and be prepared to respond to the behavioral manifestations of the disorder while meeting the complex social and academic needs of the students.

### **Emergent Theme Five: Needed Resources**

The most prevalent identified theme throughout the research was that participants identified many resources are needed in order to best met the academic and social needs of ASD



students. Needed resources are defined as identified needs desired by educators so they can best meet the needs of their students (Merriam-Webster, 2016). Common sub-themes were present in participant responses about resources needed in order for participants to feel prepared, trained, and knowledgeable in order to feel fully capable in successfully meeting the academic and social needs of ASD students. Needed resource sub-themes found were 1) training, 2) collaboration, 3) schedule accommodation, and 4) support.

***Sub-theme one: Training.*** Participants identified training as a sub-theme as a needed resource in order to best meet the academic and social needs of ASD students. Training is defined as a teacher's need for more professional development workshops and continuing education about ASD (Merriam-Webster, 2016). Participants felt as if they have not received adequate training to properly meet the academic and social needs of ASD students and that they need "More training." Teachers stated that using a responsive classroom could be beneficial yet they have not received adequate training on how to properly implement its model into their classroom. Teachers stated that using a responsive classroom model yielded the "Most success with meeting the social needs of ASD students." but that they "Have not received nearly enough training around how to properly implement it's strategies." Participants identified lack of training as a major influence that impacts their ability to properly and effectively meet the academic and social needs of ASD students. Overall, every participant in the study stated that they "Need more training." on how to properly implement teaching strategies for ASD in order to feel fully prepared and knowledgeable in their work with ASD students.

The data suggest that participants believe that they are not fully prepared for the incorporation of ASD students into their classrooms and that they need more training. This finding aligns with previously conducted research. Horrocks, White, & Roberts (2008) found

that lack of training and knowledge identified by teachers is the largest challenge they face and is the main source of resistance for many educators surrounding inclusion classrooms. Sansosti and Sansosti (2012) also found that more than half of the teachers teaching in inclusion classrooms feel that they need more training about the autism diagnosis. For inclusion classes to be successful, regular education teachers and students must understand how to academically and emotionally support and care for students with autism (Crosland & Dunlop, 2012). Often ASD students are placed in classrooms with teachers who feel inadequately prepared and/or trained on the student's social, educational, and behavioral needs. This lack of training, resources, and preparedness causes major challenges for both the student and teacher (Horrocks, White, & Roberts, 2008). Teachers acknowledge the importance of social skill instruction for students with autism, yet research suggests that evidence-based practices about social skill communication instruction are rarely employed (Hart & Whalon, 2013).

***Sub-theme two: Collaboration.*** Participants identified collaboration as a sub-theme as a needed resource in order to best meet the academic and social needs of ASD students. Collaboration is defined as a teacher's desire to have all individuals working with an ASD student work together towards the student's goals (Merriam-Webster, 2016). Participants stated the need for a collaborative approach in working with ASD students. In order to feel supported, participants stated needing the team working together with common goals surrounding their ASD students. One participant stated that in order to feel successful she needed, "A team approach - working cooperatively and collaboratively with special education teachers, the speech and language teacher, the ABA person, the behaviorist when necessary." Participants stated that they needed useful and appropriate supports in place that included other service providers such as

occupational therapists, speech therapists, physical therapists, reading specialists, and writing specialists.

The data suggest that participants believe that it is important to have all individuals working with an ASD student work together towards the student's goals. The data also suggest that participants believe it is important to have useful and appropriate supports in place for ASD students in order to best meet the student's academic and social needs. This finding aligns with previously conducted research conducted by Crosland & Dunlap (2012), which determined that school-wide consistency and training are imperative for inclusion to be fruitful, and will decrease challenges for both the teachers and students. Previous research conducted by Harrocks, White, & Roberts (2008) determined that in order for inclusion to be successful, teachers must understand autism and be prepared to respond to the behavioral manifestations of the disorder while meeting the complex social and academic needs of the students. Overall, positive organizational environments are created by having a supportive school leader, funding for resources, training, data-based decision making, and team decision making in place (Crosland & Dunlap, 2012).

***Sub-theme three: Schedule accommodations.*** Participants identified schedule accommodations as a sub-theme as a needed resource in order to best meet the academic and social needs of ASD students. Schedule accommodation is defined as a teacher's desire to have a shift in their schedule to ensure that they have an increase in their allotted time for lesson planning, team meetings, and team collaboration each week (Merriam-Webster, 2016). Participants felt they need their schedule to change when they have a student with ASD enrolled in their classroom. One participant stated the need for "more planning time." Participants identified needing an accommodation in their schedule to assist them with the increased demands

placed on them. Participants stated that this schedule change would ensure that they are spending an adequate amount of time to consulting with the team on a regular basis and modifying lesson plans.

Participants felt that the team needs to meet on a regular basis to ensure that all members are feeling supported to ensure teachers' success. One participant stated that, "With supports that are appropriate and practical, I feel confident having a child in my class with autism." Another participant stated needing, "time to meet with the service providers." Overall, in order for an ASD student to achieve academic and social success proper supports from a collaborative team must be in place, but participants stated needing time allotted into their daily schedule in order to ensure that they work collaboratively. One participant stated the need for "Time to consult and plan with these (special ed. teachers, the speech and language teacher, the ABA person, the behaviorist) people is essential."

Participants also felt that they need more time for lesson planning so they feel fully prepared to meet the needs of their ASD students. One participant stated that in order to feel successful in meeting the needs of ASD students she needed "Time set aside to modify instruction and locate content that fits their academic and cognitive abilities." Participants discussed that their lack of time for lesson planning and team meetings allotted within their schedule make them feel overwhelmed since it is "A challenge to meet their needs without taking away attention or instructional time from the general education students." Participants reported needing support from administration in increasing time allotted for lesson planning and collaboration with the team.

The data suggest that participants believe that it is important for teachers to have a shift in their schedule. The data suggest that participants believe that this schedule shift would ensure

that they have an increase in their allotted time for lesson planning, team meetings, and team collaboration each week. This finding aligns with previously conducted research by Harrocks, White, & Roberts (2008), which determined that in order for inclusion to be successful, teachers must understand autism and be prepared to respond to the behavioral manifestations of the disorder while meeting the complex social and academic needs of the students. Overall, positive organizational environments are created by having a supportive school leader, funding for resources, training, data-based decision making, and team decision making in place (Crosland & Dunlap, 2012).

***Sub-theme four: Support.*** Participants identified support as a needed resource to best meet the academic and social needs of ASD students. Support is defined as a teacher's desire to have school administration help them with their work with ASD students (Merriam-Webster, 2016). Participants identified that challenges occur when support from the school administration are not provided to the teacher or student. One participant stated that they need, "Administrators that actually know "who" our ASD students are." Participants felt that many school administrators were unaware of the demands and the resources teachers need in order to feel successful.

Several participants believed that they would feel more successful and confident in their work with ASD students with more support from administrators. One participant stated, "With supports in place, I feel successful." Participants also stated needing support for support staff in the creation and modification of coursework. One participant stated, "I felt that the student's liaison should have done a better job helping me locate content that met my student's abilities." Another participant stated needing support in the classroom with "more hands" in order to best meet their ASD students' needs. Participants stated that, "Having support from specialists within

the school, and in particular within the classroom, assisted in making these social interactions the most successful.”

The data suggest that participants believe that it is important that teachers have school administration help them with their work with ASD students. The data also suggest that participants believe they need assistance from support staff in the creation and modification of coursework. According to previous research, teachers who identified a positive school culture proved to have the most significant impact on students with ASD in an inclusion setting (Crosland & Dunlap, 2012). Previous research by Crosland and Dunlop (2012) determined that having a supportive school leader creates positive organizational environments, funding for resources, training, data-based decision making, and team decision making in place.

### **Summary**

Data was gathered from fourteen teachers from five public elementary schools via a confidential online anonymous survey. Based on the responses, common themes and sub-themes were determined. Common themes that emerged through the analysis of the data were enriching experiences, classroom challenges, preparedness and knowledge, accommodations, and resources needed. The data suggest that teachers find it both challenging and rewarding to have students with autism in their classroom. Educators identified needing more training about how to best meet the academic and social needs of autistic students. Teachers reported needing more support from administration; a team approach when working with students with autism; proper training about autism; and more time to lesson plan and collaborate with the team. Chapter 5 will interpret and connect the five major themes and their sub-themes and their connection with the three research questions of the study.

## **CHAPTER 5**

### **CONCLUSION**

This research study examined and explored the role teachers' perceptions of learners' abilities play in creating the learning environment. This study identified teachers' ideologies, feelings, and beliefs that influence their attitudes towards autistic students. It also examined whether teachers perceived they had access to the proper training, support, and tools so they could provide students with the best possible education. This study will help school administration and educators gain insight into teachers' ideologies, feelings, and beliefs that influence their attitudes towards autistic students.

The purpose of this qualitative research study was to examine, explore, and describe teachers' perceptions of high functioning autistic students and their impact on the students' learning environment in suburban elementary school inclusion classrooms. This study of experienced classroom teachers in five schools provided insight about whether educators are receiving enough training, support, and tools so they can provide students with the best possible education. The research explored teachers' perceptions by collecting data from fourteen teachers who completed an on-line anonymous open-ended sixteen-question questionnaire on teachers' perceptions of autistic students. This chapter includes the interpretation of findings, implications, and summary of this research. This chapter also presents the conclusions that are inferred from the research results.

#### **Interpretation of Findings**

A detailed interpretation and analysis of the data led to the identification of themes and their sub-themes, which addressed the three research questions of the study. The following five themes present throughout the research were 1) enriching experiences, 2) classroom challenges,

3) preparedness and knowledge, 4) accommodations, and 5) needed supports. The seven sub-themes for enriching experiences are 1) teaches empathy, 2) teaches compassion, 3) teaches tolerance, 4) teaches flexibility, 5) understanding differences, 6) creates leaders, and 7) increases teaching skills. The four sub-themes for classroom challenges are 1) behavioral issues, 2) time commitment, 3) lack of training, and 4) functioning level. The three sub-themes for preparedness and knowledge are 1) lack of preparation, 2) lack of training, and 3) lack of time. The three sub-themes for accommodations are 1) workload modifications, 2) organizational skills, and 3) classroom arrangement. The four sub-themes for needed resources are 1) training, 2) collaboration, 3) schedule accommodation, and 4) support. The five emergent themes and their respective sub-themes assisted me in answering the following research questions:

- How do teachers perceive high functioning autistic students' academic capabilities?
- How does a teacher's training about autism impact the teacher's perception towards a student's academic capabilities?
- How does a teacher's perception towards a student's diagnosis impact teaching strategies?

The sociocultural/social constructivist learning theory guided this study since it focuses on the roles parents, teachers, schools, and society play in mediating the learning process of underrepresented students. The sociocultural/social constructivist learning theory examines teaching practices to best support underrepresented students, such as students with disabilities (Woolfolk, Davis & Anderman, 2013). Sociocultural/social constructivist learning theorists also believe that as leaders, teachers can have a positive influence on students when teaching practices are continuously working to meet the needs of the underrepresented student (Woolfolk,



Davis & Anderman, 2013). A sociocultural/social constructivist learning theory lens was utilized in order to examine the larger contextual impact teachers' perceptions about autism has on the student's learning environment.

A recruitment letter was e-mailed to all teachers at each of the five schools. In this recruitment letter I introduced myself, informed them of the purpose of the research study, explained the criteria to participate in the study, and included a link to the on-line questionnaire (See Appendix A). Teachers included in the study had varied backgrounds, ethnicities, ages, education levels, and years teaching. The criteria for this research study were developed based on ensuring the research participants had an adequate level of previous teaching experience, a higher level of education, and some exposure to working with ASD students. The criteria for participation in this research study were that the teacher must:

- Possess a Master's degree in Education or be enrolled in a Master's degree program;
- Have taught 1st, 2nd, 3rd, and/or 4th grade within the public education system for at least two years;
- Be a lead/head teacher in his or her classroom;
- Have taught at least one student with autism within the past four school years.

The timeline of four years was chosen based on wanting the teachers' viewpoints and beliefs to be based on recent events and situations.

Questionnaires of teachers that did not fit the survey criteria were not included in the analysis of the data. There were "stops" embedded into the survey that screened for eligible participants. If a participant answered a question that did not fit the demographics of the research study, they were disqualified from the survey and were directed to a stop page that

stated “Thank you for taking the time to start this survey, however, you are not eligible to complete the survey.” In order to maintain the teachers’ anonymity, I did not have access to the teachers’ names or email addresses; therefore, a contact person at each school e-mailed the recruitment letter and active link to the survey instrument (see Appendix A). Data from the anonymous surveys were downloaded from Qualtrics into PDF format and analyzed. The data was stored on a secure and encrypted storage drive. Both Qualtrics and NVivo were used in the analysis of the data for this study.

Each theme and their sub-themes provided valuable information to best answer the three research questions (see Figure 5.1). The following section interprets and connects these themes and their sub-themes with the three research questions.

*Figure 5.1: Research questions connections to emergent themes*

<b>Research Question</b>	<b>Emergent Themes</b>
How do teachers perceive high functioning autistic students' academic capabilities?	Enriching experiences Classroom challenges
How does a teacher’s training about autism impact the teacher's perception towards a student's academic capabilities?	Preparedness and knowledge Needed resources
How does a teacher's perception towards a student's diagnosis impact teaching strategies?	Accommodations

### **Research Question One: How do teachers perceive high functioning autistic students’ academic capabilities?**

The emergent themes of 1) enriching experience and 2) classroom challenges were used to address research question one, how do teachers perceive high functioning autistic students' and its impact on the learning environment. In order to answer research question one, the sub-themes for enriching experiences used were that the incorporation of ASD students within a classroom 1) teaches empathy, 2) teaches compassion, 3) teaches tolerance, 4) teaches flexibility, 5) understanding differences, 6) creates leaders, and 7) increases teaching skills. In order to

answer research question one, the emergent theme classroom challenges sub-themes of 1) behavioral issues, 2) time commitment, 3) lack of training, and 4) functioning level were used.

### **Emergent Theme One: Enriching Experiences**

Findings revealed that participants felt that having a student with ASD within their classroom enriches the experience of the classroom. Enriching experience is defined as a teacher's positive feelings towards the integration of ASD students and how it enhances his or her classroom (Merriam-Webster, 2016). Sub-themes for enriching experiences are that the incorporation of ASD students within a classroom 1) teaches empathy, 2) teaches compassion, 3) teaches tolerance, 4) teaches flexibility, 5) understanding differences, 6) creates leaders, and 7) increases teaching skills. The data suggest that participants believe that the incorporation of ASD students into their classroom benefits ASD students, teachers, and non-ASD students. One participant stated, "Benefits the whole class as it provides a sense of class community." Overall, the data suggest that participants feel positively towards the inclusion of ASD students. All fourteen participants discussed the benefits of having an ASD student within their classroom and the positive ways it impacts the students and the class environment. All seven sub-themes for the emergent theme enriching experiences were used in order to answer research question one. These findings revealed that participants have positive views toward the incorporation of ASD students into their classrooms.

***Sub-theme one: Teaches compassion.*** The findings of this study indicate that participants have favorable feelings towards ASD students based on the lessons they teach non-ASD students. Compassion is defined as the teacher or student's desire to help someone else who is struggling (Merriam-Webster, 2016). Teaching compassion was the most frequently discussed sub-theme by research participants. Participants felt that having a student with autism

in their class helped both the teacher and the students become more compassionate towards one another's differences. One participant stated, "Teaching tolerance, respect, understanding differences, compassion, and perseverance." This finding aligns with previously conducted research conducted by Sansosti and Sansosti (2012) who determined that teachers viewed inclusion positively because it improves the learning environment for the entire class.

The data also indicates that participants felt that having ASD students within their classroom adds a great dynamic to the classroom. This could be due to the fact that teachers feel that it teaches non-ASD students how to be compassionate towards one another's differences. Overall, many participants felt that having ASD students within their classroom assisted non-ASD students by "teaching tolerance, respect, and compassion." This classroom dynamic creates a positive learning experience for both ASD and non-ASD students. The findings from this study aligns with previous research, which demonstrated that in general, educators have positive attitudes surrounding students with autism (Park & Chitiyo, 2011).

The positive feelings and attitudes revealed within this research study can have an impact on a student's ability to learn. The data indicated that these positive feelings of how ASD students help teach non-ASD students compassion can have a direct impact on a student's academic capabilities. These favorable feelings towards ASD students can influence the students' feelings towards their academic achievement and self-esteem. Teachers' attitudes and beliefs can influence how they feel about students, and their level of expectations can have a direct influence on a student's self-image and academic performance (Park & Chitiyo, 2011). One participant stated that having an ASD student in their classroom assisted their non-ASD students develop compassion towards ASD students and their differences by "being kind and helping out." Participants believed that having ASD students within their classroom helped

students learn skills that they would use outside of the classroom by “preparing students for life outside of school.”

Overall, the data revealed that the inclusion of ASD students in a classroom exposes non-ASD students to unique situations, which in turn teaches the students compassion. This enhances the classroom experience for all students and enhances teachers’ positive feelings towards the inclusion of ASD students. This enhancement to the classroom environment improves the learning environment and increases teachers’ perceptions of students’ academic achievement (See Figure 5.2).

*Figure 5.2: The presence of compassion within the learning environment and its impact on academic outcomes*



***Sub-theme two: Teaches empathy.*** The sub-theme of teaches empathy was discovered through the analysis of the data surrounding the theme of enriching experience. Empathy is defined as the teacher or student’s ability to understand someone else’s experience (Merriam-Webster, 2016). Teaching empathy was a frequently discussed sub-theme by the research participants. Numerous participants discussed how the incorporation of ASD students within their classroom helped students to learn empathy for others students. One participant stated, “It created empathy and understanding in the model students.” The findings from this study aligns with previously conducted research by Sansosti and Sansosti (2012) who determined that teachers viewed inclusion positively because it improves the learning environment for the entire class (See Figure 5.3).

*Figure 5.3: The presence of empathy within the learning environment and its impact on academic outcomes*



The data also indicates that participants feel that having ASD students within their classroom adds a great dynamic to the classroom. This could be due to the fact that teachers feel that it teaches non-ASD students to understand someone else's experience. Overall, many participants felt that having ASD students in their classroom assisted non-ASD students by "being kind and helping out the students with autism." This classroom dynamic creates a positive learning experience that both ASD and non-ASD students. The findings from this study align with previously conducted research, which demonstrated that in general, educators have positive attitudes surrounding students with autism (Park & Chitiyo, 2011).

The positive feelings and attitudes revealed within this research study can have an impact on a student's ability to learn. The data indicated that these positive feelings of how ASD students help teach non-ASD students empathy can have a direct impact on a student's academic capabilities. These favorable feelings towards ASD students can influence the students' feelings towards their academic achievement and self-esteem. Teachers' attitudes and beliefs can influence how they feel about students, and their level of expectations can have a direct influence on a student's self-image and academic performance (Park & Chitiyo, 2011). Participants stated that having an ASD student in their classroom assisted their non-ASD students to develop empathy towards ASD students. Participants believed that having ASD students within their

classroom helped students learn skills that they would use outside of the classroom by “preparing students for life outside of school.”

Overall, the data revealed that the inclusion of ASD students into a classroom exposes non-ASD students to unique situations, which in turn, teaches the students empathy. This enhances the classroom experience for all students and enhances teachers’ positive feelings towards the inclusion of ASD students. This enhancement to the classroom environment improves the learning environment and increases teacher’s perceptions of students’ academic achievement.

***Sub-theme three: Teaches tolerance.*** The sub-theme of teaches tolerance was discovered through the analysis of the data surrounding the theme of enriching experience. Tolerance is defined as the teacher or student’s ability to endure challenges that arise within the classroom (Merriam-Webster, 2016). Many participants discussed how the incorporation of ASD students within their classroom helps students to learn how to be tolerant of other students’ differences. One participant stated that she believes the incorporation of ASD students into the classroom helps “Students learn tolerance and acceptance that ‘we are all alike...we are all different.’” The findings from this study aligns with previously conducted research by Sansosti and Sansosti (2012) who determined that teachers viewed inclusion positively because it improves the learning environment and outcomes for the entire class (See figure 5.4).

*Figure 5.4: The presence of tolerance within the learning environment and its impact on academic outcomes*



The data suggest that participants believe that the incorporation of ASD students into their classroom benefits ASD students, teachers, and non-ASD students by teaching them to be tolerant of each other's differences. The positive feelings and attitudes revealed within this research study can have an impact on a student's ability to learn. The data indicated that these positive feelings of how ASD students help teach non-ASD students tolerance can have a direct impact on a student's academic capabilities. These favorable feelings towards ASD students can influence the students' feelings towards their academic achievement and self-esteem. Teachers' attitudes and beliefs can influence how they feel about students, and their level of expectations can have a direct influence on a student's self-image and academic performance (Park & Chitiyo, 2011). Participants stated that having an ASD student in their classroom assisted their non-ASD students develop empathy towards ASD students. Participants believed that having ASD students within their classroom helped students learn skills that they would use outside of the classroom by "preparing students for life outside of school."

Overall, the data revealed that the inclusion of ASD students into a classroom exposes non-ASD students to unique learning situations, which in turn teaches the students tolerance. This enhances the classroom experience for all students and enhances teachers' positive feelings towards the inclusion of ASD students. This enhancement to the classroom environment improves the learning environment and increases teachers' perceptions of students' academic achievement.

***Sub-theme four: Teaches flexibility.*** The sub-theme of teaches flexibility was discovered through the analysis of the data surrounding the theme of enriching experience. Flexibility is defined as the teacher or student's ability to change or try new things (Merriam-Webster, 2016). Many research participants discussed how the incorporation of ASD students



within their classroom teaches everyone in the class to become more flexible. One participant stated, “It has taught me to be a more flexible teacher.” Participants discussed that the presence of ASD students within their classroom helps to teach non-ASD students and teachers to be more flexible since ASD students’ behavioral issues can sometimes impact the lesson plans and classroom schedule. The findings from this study aligns with previously conducted research conducted by Sansosti and Sansosti (2012) who determined that teachers viewed inclusion positively because it improves the learning environment for the entire class (See Figure 5.5).

*Figure 5.5: The ability of students to be flexible within the learning environment and its impact on academic outcomes*



The data also indicate that participants feel that having ASD students within their classroom adds a great dynamic to the classroom. This could be due to the fact that teachers feel that it teaches non-ASD students how to be flexible. The data also suggest that participants believe that it helps teachers or students change or try new things within the classroom in order to best support ASD students’ needs. Participants stated that having a student with ASD within their classroom taught them to be more flexible in their teaching approach. For example, numerous participants discussed the importance of needing to be flexible in lesson panning since every “child and every day can be different” based on the student’s needs and level of functioning. This flexible classroom dynamic creates a positive learning experience that benefits both ASD and non-ASD students. One participant stated that it “Benefits the whole class as it provides a sense of class community and builds upon working together and accepting differences in others.” The findings from this study align with previously conducted research, which

demonstrated that in general, educators have positive attitudes towards students with autism (Park & Chitiyo, 2011).

The data suggest that participants believe that the incorporation of ASD students into their classroom benefits ASD students, teachers, and non-ASD students by teaching them to be flexible. The positive feelings and attitudes revealed within this research study can have an impact on a student's ability to learn. The data indicated that these positive feelings could have a direct impact on a student's academic capabilities. These favorable feelings towards ASD students can influence the students' feelings towards their academic achievement and self-esteem. Teachers' attitudes and beliefs can influence how they feel about students, and their level of expectations can have a direct influence on a student's self-image and academic performance (Park & Chitiyo, 2011). Participants stated that having an ASD student in their classroom assisted their non-ASD students develop flexibility within the classroom. Participants believed that having ASD students within their classroom helped students learn skills that they would use outside of the classroom by "preparing students for life outside of school."

Overall, the data revealed that the inclusion of ASD students into a classroom exposes non-ASD students to unique situations, which in turn teaches the students to be flexible. This enhances the classroom experience for all students and enhances teachers' positive feelings towards the inclusion of ASD students. This enhancement to the classroom environment improves the learning environment and increases teacher's perceptions of students' academic achievement.

***Sub-theme five: Understanding differences.*** The findings of this study indicate that participants have favorable feelings towards ASD students based on the lessons they teach non-ASD students. Understanding of differences is defined as the teacher or student's ability to

comprehend that not all individuals are the same (Merriam-Webster, 2016). Participants felt that having a student with autism in their class helped both the teachers and the students understand differences by exposing them to unique situations they may not encounter in a non-inclusion classroom. One participant stated that the incorporation of ASD students helps to enhance the classroom experience by “teaching students lessons that cannot be learned from a book.” This finding aligns with previously conducted research conducted by Sansosti and Sansosti (2012), who determined that teachers viewed inclusion positively because it improves the learning environment and outcomes for the entire class (See Figure 5.6).

*Figure 5.6: The ability of students to understand differences within the learning environment and its impact on academic outcomes*



The data also indicates that participants feel that having ASD students within their classroom adds a great dynamic to the classroom. This could be due to the fact that teachers feel that it teaches non-ASD students how to understand differences. Overall, participants felt that having ASD students in their classroom adds “a great dynamic to the classroom.” For example, numerous participants discussed that their non-ASD students develop compassion towards ASD students and their differences by “being kind and helping out.” This classroom dynamic creates a positive learning experience that benefits both ASD and non-ASD students. One participant stated that it “Benefits the whole class as it provides a sense of class community and builds upon working together and accepting differences in others.” The findings from this study align with previously conducted research, which demonstrated that in general educators have positive attitudes towards students with autism (Park & Chitiyo, 2011).

The positive feelings and attitudes teachers revealed within this research study can have an impact on a student's ability to learn. The data indicated that these positive feelings could have a direct impact on a student's academic capabilities. These favorable feelings towards ASD students can influence the students' feelings towards their academic achievement and self-esteem. Teachers' attitudes and beliefs can influence how they feel about students, and their level of expectations can have a direct influence on a student's self-image and academic performance (Park & Chitiyo, 2011). One participant stated that having an ASD student in their classroom assisted the class dynamic by "having all students understand differences." Participants believed that having ASD students within their classroom helped students learn skills that they would use outside of the classroom by "preparing students for life outside of school."

Previous research demonstrated that work experience plays a crucial role in impacting teachers' positive attitudes (Harrocks, White, & Roberts, 2008; Park & Chitiyo, 2011). Therefore, the previous teaching experience of the participants within this study could have influenced the participants' positive attitudes towards ASD students. The majority of participants in this study reported having more than ten years of experience teaching. This previous work experience and exposure to ASD students could have influenced the participants. Previous research conducted by Park and Chitiyo (2011) found that the more exposure a teacher had to children with ASD, either through previous experience in special education, having friends or family members with a disability, or other contact, the more the teacher's attitude towards students with autism positively increased (Park & Chitiyo, 2011).

Previous research has demonstrated that gender and age may play a crucial role in impacting teachers' positive attitudes (Harrocks, White, & Roberts, 2008; Park & Chitiyo, 2011).

Therefore, the gender and age of the participants in this study may have also had an impact on the study's findings. All study participants were female and reported positive attitudes towards ASD students. Previous research indicated that female teachers tend to have more positive attitudes than male teachers towards children with autism (Park & Chitiyo, 2011). The age of a teacher also plays a role in his or her attitude towards ASD students. Teachers above the age of 56 reported lower attitude scores than teachers between the ages of 20 to 55 years old (Park & Chitiyo, 2011). The participants within this research study could have noted more favorable feelings towards the inclusion of ASD student with in the classroom since 11 of 14 of participants were under the age of fifty-six. It was noted that the positive feelings participants described towards the inclusion of ASD students was focused on how ASD students benefit non-ASD students. Participants did not identify how they directly felt about ASD students themselves, but rather ways they help out non-ASD students.

Overall, the data revealed that the inclusion of ASD students into a classroom exposes non-ASD students to unique situations, which in turn, teaches the students to understand differences. This enhances the classroom experience for all students and enhances teachers' positive feelings towards the inclusion of ASD students. This enhancement to the classroom environment improves the learning environment and increases teacher's perceptions of students' academic achievement.

***Sub-theme six: Creates leaders.*** A common sub-theme that emerged about how ASD students enhance the classroom experience is by creating leaders. Creates leaders is defined as a student's ability to become a leader within the classroom (Merriam-Webster, 2016). The lessons learned from having an ASD student within the classroom enhance the overall experience of the classroom and help to teach students to become leaders. One participant stated that having ASD

students within the classroom “helps students become leaders.” While another teacher stated that it “benefits the whole class as it provides a sense of class community and builds upon working together and accepting differences in others.” The data also suggest that participants believe that the incorporation of ASD students into their class also helps students to become leaders by helping ASD learn social skills. The findings from this study aligns with previously conducted research conducted by Sansosti and Sansosti (2012) who determined that teachers viewed inclusion positively because it improves the learning environment for the entire class (See Figure 5.7).

*Figure 5.7: The ability to create leaders within the learning environment and its impact on academic outcomes*



The data also indicates that participants feel that having ASD students within their classroom adds a great dynamic to the classroom. This could be due to the fact that teachers feel that it teaches non-ASD students how to understand differences. Overall, participants felt that having ASD students in their classroom adds “a great dynamic to the classroom.” For example, numerous participants discussed that their non-ASD students develop compassion towards ASD students and their differences by “being kind and helping out.” This classroom dynamic creates a positive learning experience that benefits both ASD and non-ASD students. One participant stated, “The other students have been very helpful this year in being kind and helping out the students with autism.” The findings from this study align with previously conducted research, which demonstrated that in general educators have positive attitudes towards students with autism (Park & Chitiyo, 2011).

The positive feelings and attitudes revealed within this research study can have an impact on a student's ability to learn. The data indicated that these positive feelings could have a direct impact on a student's academic capabilities. These favorable feelings towards ASD students can influence the students' feelings towards their academic achievement and self-esteem. Teachers' attitudes and beliefs can influence how they feel about students, and their level of expectations can have a direct influence on a student's self-image and academic performance (Park & Chitiyo, 2011). One participant stated that having an ASD student in their classroom assisted the class dynamic since it "benefits the whole class as it provides a sense of class community and builds upon working together and accepting differences in others." Participants believed that having ASD students within their classroom helped students learn skills that they would use outside of the classroom by "preparing students for life outside of school."

Overall, the data revealed that the inclusion of ASD students into a classroom exposes non-ASD students to unique situations, which in turn creates classroom leaders. This enhances the classroom experience for all students and enhances teachers' positive feelings towards the inclusion of ASD students. This enhancement to the classroom environment improves the learning environment and increases teachers' perceptions of students' academic achievement.

***Sub-theme seven: Increases teaching skills.*** Another common sub-theme that emerged from the analysis of the data was that ASD students enhance the classroom experience by increasing teaching skills. Increases teaching skills are defined as a teacher's ability to learn and implement new teaching strategies (Merriam-Webster, 2016). Examination of the data revealed that participants stated that having a student with ASD in their classroom helped to increase their teaching skills. Participants felt that this increased their teaching skills, which in turn made them

better educators. One participant stated that “ASD students help me to become a better teacher and person.”

The data also indicate that participants felt having ASD students within their classroom adds a great dynamic to the classroom. Teachers feel that such inclusion teaches non-ASD students how to understand differences. For example, one participant discussed, “I love learning new ways that I can teach children information.” This attitude creates a positive learning experience that benefits both ASD and non-ASD students. Participants felt that these new teaching skills benefit the ways they interact with and teach all children (See Figure 5.8). For example, participants felt that teaching ASD students is a way for them to improve their ability to teach all students, not just ASD students. One stated “I always see it as a great learning experience that will improve my teaching of all students.” The findings from this study align with previously conducted research, which demonstrated that in general educators have positive attitudes towards students with autism (Park & Chitiyo, 2011).

*Figure 5.8: Increase in teaching skills and its impact on academic outcomes*



The positive feelings and attitudes revealed within this research study can have an impact on a student’s ability to learn. The data indicated that these positive feelings could have a direct impact on a student’s academic capabilities. These favorable feelings towards ASD students can influence the students’ feelings towards their academic achievement and self-esteem. Teachers’ attitudes and beliefs can influence how they feel about students, and their level of expectations can have a direct influence on a student’s self-image and academic performance (Park & Chitiyo, 2011). One participant stated that having an ASD student in their classroom assisted the class



dynamic since “teaching ASD students helps teachers to discover new teaching approaches in order to best support students with challenges.” Participants described improving their teaching skills through the lessons they learned by interacting with their ASD students. One participant stated that ASD students “challenge your creativity in ensuring their educational success.” The data revealed that participants felt that the inclusion of ASD students within their class creates an opportunity of growth for educators to become better teachers, and also helps students to become better leaders by creating a positive classroom dynamic.

Overall, the data revealed that the inclusion of ASD students into a classroom exposes non-ASD students to unique situations, which in turn, provides opportunities for teachers to learn new teaching skills. This improves the classroom experience for all students and enhances teachers’ positive feelings towards the inclusion of ASD students. This enhancement to the classroom environment improves the learning environment and increases teacher’s perceptions of students’ academic achievement.

### **Emergent Theme Two: Classroom Challenges**

Despite the fact that teachers felt that the inclusion of ASD students enhanced the classroom experience, examination of the data uncovered a theme of many challenges that occur when an ASD student is integrated into the classroom. Classroom challenges are defined as difficulties that occur due to the inclusion of ASD students within the class (Merriam-Webster, 2016). The evidence suggests that participants felt that having a student with ASD within their classroom is challenging based on their behavioral issues, lower level of functioning, and below grade level academic capabilities. The data also suggest that participants believe that if a student is not academically, emotionally, and socially meeting the standard for their age range, it is challenging to have them in their class. Classroom challenges sub-themes used were 1)

behavioral issues, 2) time commitment, 3) lack of training, and 4) functioning level. The findings revealed that the participants identified challenges with ASD students' classroom behaviors and lower level of functioning and their connection to the students' decrease in academic capabilities.

***Sub-theme one: Behavioral issues.*** Findings revealed that participants felt that having a student with ASD within their classroom was challenging due to their potential behavioral issues. Behavioral issues are defined as a student's actions within the classroom that are destructive, intense, or aggressive (Merriam-Webster, 2016). The evidence suggests that participants feel overwhelmed with the inclusion of ASD students based on these behavioral issues. All fourteen participants discussed that an ASD student's possible behavioral issues directly impact a student's academic capabilities.

The data suggest that participants believe that the incorporation of ASD students into their classroom is challenging for both teachers and non-ASD students. One participant stated, "Outbursts and meltdowns impact the entire class." This finding aligns with previously conducted research that determined that educators believe that the benefits of inclusion are often coupled with some significant challenges (Chamberlin, Kasari, & Rotheram, 2003; Dahle, 2003; Crosland & Dunlap, 2012). Previous research determined that teachers believe that one of the largest barriers and challenges with the inclusion of ASD students are potential behavioral problems and disruptive behaviors (Crosland & Dunlap, 2012). Participants identified disruptive and violent behaviors by ASD students as one factor having the largest impact on non-ASD students, and that this could potentially be very distracting to their non-ASD students. This finding aligns with previously conducted research that demonstrated that teachers' attitudes and

beliefs could influence how they feel about students and their level of expectations within the classroom (Sansosti & Sansosti, 2012).

This study finds that a student's outbursts, meltdowns, and violent behaviors were the most disruptive behaviors and that these behaviors impact a student's academic capabilities (See Figure 5.9). All research study participants noted behavioral issues such as disruptive behaviors, outbursts, meltdowns, and violent behaviors as major classroom challenges that impact a student's ability to learn. One participant stated that the inclusion of ASD students was "challenging because the behaviors of the students would often interfere with their academic success." Previous research conducted by Sansosti and Sansosti (2012) found that teachers identified concerns with behavioral problems and disruptive behaviors and their potential impact on the learning, safety, and well-being of the students. A teacher's attitudes and beliefs could influence how they feel about students and their level of academic expectations. Therefore, a participant's negative attitudes towards potential behavioral issues could potentially influence a student's academic capabilities.

*Figure 5.9: The presence of behavioral issues within the learning environment and its impact on academic capabilities*



Overall, this study discovered that participants believe that ASD students are challenging to work with based on their behavioral issues. Many participants felt that an ASD student's behavioral issues directly impact a student's academic capabilities. This study suggests that ASD students have a lower level of academic capabilities than non-ASD students based on these behavioral issues. This study also suggests that participants believe that challenging behaviors

are related to students' lower level of functioning, which in turn impacts their level of academic achievement.

***Sub-theme two: Time commitment.*** The increase in time commitment when working with ASD students was identified as a major challenge for most teachers. Time commitment is defined as the amount of time a teacher spends preparing lesson plans and in team meetings (Merriam-Webster, 2016). Participants identified that this increase in time commitment placed a higher demand on them due to the increase in team meetings and lesson planning. Increased need for lesson planning is defined as a teacher's desire to have more time allotted to prepare for class activities. One participant stated a need for, "time set aside to modify instruction and locate content that fits their academic and cognitive abilities." This lack of time caused many participants to feel overwhelmed in their work with ASD students (See Figure 5.10).

*Figure 5.10: Increase in teacher time commitment within the learning environment and its impact on academic capabilities*



The data indicate that participants feel that ASD students are more challenging to work with due to their academic capabilities. Overall, this study also discovered that participants believe that ASD students are challenging to work with based on the increased time commitment for team meetings and lesson planning. This study suggests that ASD students have a lower level of academic capabilities than non-ASD students. Many participants felt this increase in time commitment directly impacted their ability to address a student's decrease in academic capabilities. Previous research discussed that a lack of training, resources, and preparedness causes major challenges for both the student and teacher (Horrocks, White, & Roberts, 2008).

This study also suggests that this increase in time commitment is due to ASD students' challenging behaviors which are related to their lower level of functioning, which in turn impacts their level of academic achievement.

Previously conducted research has not discussed teachers' beliefs surrounding a teacher's increase in time commitment because of increased demand for team meetings and lesson planning. However, teachers could feel this way based on their lack of training and knowledge on ASD. Previously conducted research demonstrated that teachers' attitudes and beliefs could influence how they feel about students and their level of expectations. These beliefs and expectations can influence a student's self-image and academic performance (Park & Chitiyo, 2011). These negative perceptions could also have a direct impact on the student's perception of their academic abilities. This study determined that teachers believe that there is an increase in their time commitment to work with ASD students based on lower level of academic capabilities than non-ASD students because of their lower level of functioning.

***Sub-theme three: Lack of training.*** Another sub-theme discussed by almost all participants as a challenge was their lack of training on ASD. Lack of training is defined as a teacher's need for more professional development workshops and continuing education on ASD (Merriam-Webster, 2016). Participants identified this lack of training on ASD as a major hurdle in their ability to properly implement teaching strategies in an effective and timely manner (See Figure 5.11). Many participants simply stated that they need "more training." Horrocks, White, & Roberts (2008) and Busby, et al. (2012) found that lack of training and knowledge identified by teachers is the largest challenge they face and is the main source of resistance from many educators surrounding inclusion classrooms. One participant stated, "We gained training on the job - a little more training, prior to the arrival of the students, would have been nice." Sansosti

and Sansosti (2012) also found that more than half of the teachers teaching in inclusion classrooms feel that they need more training on the autism diagnosis.

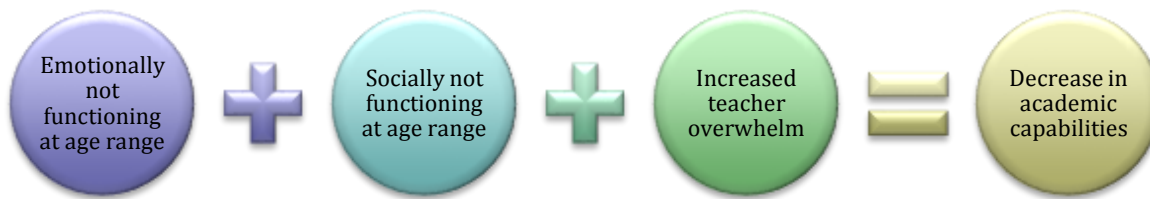
*Figure 5.11: Lack of teacher training and its impact on academic capabilities*



This lack of training causes many challenges for educators since they feel that they are improperly implementing academic and social strategies and are underprepared to meet ASD students' academic and social needs. However, teachers could feel this way based on their lack of training and knowledge on ASD. Previously conducted research demonstrated that teachers' attitudes and beliefs could influence how they feel about students and their level of expectations. These beliefs and expectations can influence a student's self-image and academic performance (Park & Chitiyo, 2011). These negative perceptions could also have a direct impact on students' perceptions of their academic abilities. Participants identified that challenges occur when they lack the proper training to support a student's decreased academic and functioning level.

***Sub-theme four: Functioning level.*** Findings revealed that having a student with ASD within their classroom was challenging due to their potential lower level of functioning. Low level of functioning is defined as a student emotionally and socially not meeting the standard for their age range (Merriam-Webster, 2016). The evidence suggests that participants felt overwhelmed with the inclusion of ASD students based on their lower level of functioning (See Figure 5.12). All fourteen participants discussed that an ASD student's lower level of functioning directly impacts the student's academic capabilities.

*Figure 5.12: Lower level of student functioning and its impact on academic capabilities*



The data indicate that participants feel that ASD students are more challenging to work with. Participants identified that challenges occur when a student's level of functioning impacts their ability to academically perform at grade level. Participants' negative attitudes towards their level of functioning could potentially influence a student's academic capabilities. Previously conducted research demonstrated that teachers' attitudes and beliefs could influence how they feel about students and their level of expectations. These beliefs and expectations can influence a student's self-image and academic performance (Park & Chitiyo, 2011). These negative perceptions could also have a direct impact on the student's perception of his or her academic abilities.

Overall, this study discovered that participants believe that ASD students are challenging to work with based on their lower level of functioning. Participants felt that ASD students' lower level of functioning directly impacts a student's academic capabilities. This study determined that teachers believe that ASD students have a lower level of academic capabilities than non-ASD students because of their lower level of functioning.

**Question two: How does a teacher's training about autism impact the teacher's perception toward a student's academic capabilities?**

The emergent themes 1) preparedness and knowledge and 2) needed resources were used to address research question two, how does a teacher's training about autism impact the teacher's perception toward a student's academic capabilities. Some of the sub-themes for each emergent theme were used in order to best address research question two. Preparedness and knowledge

sub-themes used to address research question two were 1) lack of preparation, 2) lack of training, and 3) lack of time. Needed resources sub-themes used to address research question two were 1) training, 2) collaboration, 3) schedule accommodation, and 4) support.

### **Emergent Theme One: Preparedness and Knowledge**

Findings revealed that participants felt that they lack the proper preparedness and knowledge to best support ASD students within their classroom. Preparedness and knowledge is defined as a teacher's ability to feel ready to meet the needs of ASD students and their capacity to identify these needs (Merriam-Webster, 2016). Most participants discussed feeling inadequately prepared to meet the academic and social needs of ASD students. The data suggest that participants feel they lack the proper preparation and training needed to effectively teach ASD students. Preparedness and knowledge sub-themes used to address research question two were 1) lack of preparation, 2) lack of training, and 3) lack of time. These findings revealed that participants feel underprepared and lack the knowledge needed to successfully meet the academic and social needs of ASD students in their classroom.

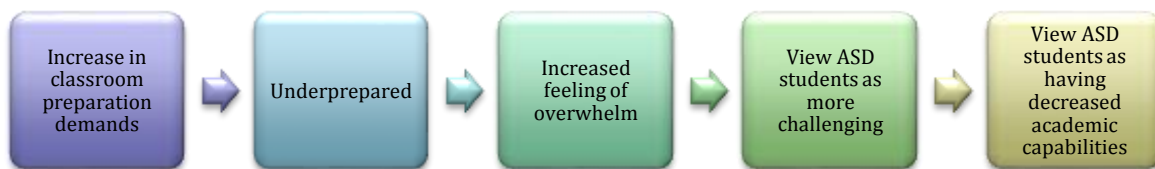
***Sub-theme one: Lack of preparation.*** Findings revealed that participants felt that they do not feel fully prepared to meet ASD students' needs. Lack of preparedness is defined as a teacher feeling as if he or she is not ready to meet the needs of ASD students (Merriam-Webster, 2016). The data suggest that participants believe that they are not fully prepared for the incorporation of ASD students into their classroom. Participants identified not feeling prepared since they "do not have enough time to collaborate with other service providers," or to "modify their lesson plans" to meet ASD students' academic needs. Lack of preparation was one of the most frequently discussed challenges noted by participants in their ability to best meet the academic and social needs of ASD students. This lack of preparation causes participants to feel



overwhelmed in their work with ASD students. Most participants stated that they were unaware of the hours of extra work it would take for them to work with ASD students. For example, one participant stated, “You need to know the zones of regulations, be prepared for hours of collaboration of the team -in order to meet all of the social/emotional, academic needs.” The data also revealed that participants believe that teachers do not feel ready to meet the needs of ASD students.

This finding aligns with previous research conducted by Harrocks, White, & Roberts (2008), which determined that in order for inclusion to be successful, teachers must understand autism and be prepared to respond to the behavioral manifestations of the disorder while meeting the complex social and academic needs of the students. Therefore, a teacher’s lack of preparation could directly impact how a teacher perceives an ASD student (See Figure 5.13). If a teacher feels underprepared and overwhelmed, this in turn could cause them to feel as if ASD students are more challenging to work with.

*Figure 5.13: Lack of teacher preparation and its impact on academic capabilities*



Participants discussed that their lack of preparedness and knowledge directly impacted their success in meeting the needs of ASD students. Support from administration and an increase in time to lesson plan throughout the day was identified by participants as a way to decrease their feelings of overwhelm. Positive organizational environments are created by having a supportive school leader, funding for resources, training, data-based decision making, and team decision making in place (Crosland & Dunlap, 2012).

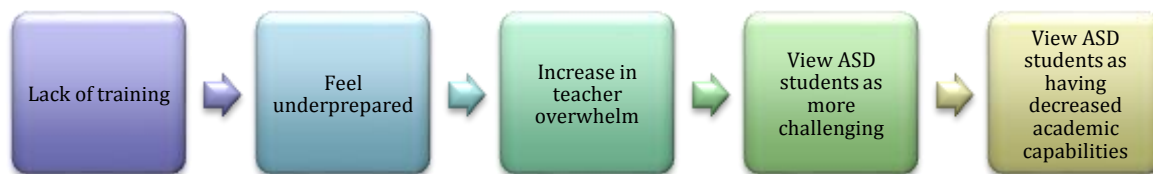
Overall, this study discovered that participants believe that they are inadequately prepared to meet the academic and social needs of ASD students. Participants identified this lack of preparation as a major challenge in their ability to support ASD students. Participants identified this lack of preparation as a challenge because ASD students' lower functioning level and academic capabilities require more preparation.

***Sub-theme two: Lack of training.*** Findings revealed that participants felt that they lack enough training to effectively teach ASD students. Lack of training is defined as a teacher feeling that he or she needs more professional development workshops and continuing education on ASD (Merriam-Webster, 2016). Lack of training was the most frequently discussed challenge noted by participants in their ability to best meet the academic and social needs of ASD students. Participants identified lack of training as a major influence that impacts their ability to feel prepared and knowledgeable, and to properly and effectively meet the academic and social needs of ASD students. One participant stated that in their classroom, "the number of ASD students is much higher and teachers do not have specialized training." Hart and Whalon (2012) determined that establishing a learning environment that is based on evidence-based best treatment practices supports the various academic and behavioral needs of ASD students.

Sansosti and Sansosti (2012) found that more than half of the teachers teaching in inclusion classrooms feel that they need more training about the autism diagnosis. All participants within this research study stated that they are not fully prepared for the incorporation of ASD students into their classroom and that they need more training. Previous research conducted by Harrocks, White, & Roberts (2008) determined that in order for inclusion to be successful, teachers must understand autism and be prepared to respond to the behavioral manifestations of the disorder while meeting the complex social and academic needs of the

students. Therefore, a participant's lack of training could directly impact how a teacher views the academic success of their ASD students (See Figure 5.14). Horrocks, White, & Roberts (2008) also found that lack of training and knowledge identified by teachers is the largest challenge they face and is the main source of resistance for many educators surrounding inclusion classrooms. Participants discussed the importance of the use of the "zone" approach within the classroom as a helpful tool in teaching students with ASD. One participant stated, "I wish I had more "zone" background and training prior to teaching students with autism." Overall, every participant in the study stated that they need more training on how to properly implement teaching strategies for ASD students in order to feel fully prepared and knowledgeable in their work with ASD students.

*Figure 5.14: Lack of teacher training and its impact on academic capabilities*



***Sub-theme three: Lack of time.*** Participants identified lack of time as another sub-theme in their preparedness and knowledge surrounding ASD students. Lack of time is defined as a teacher's desire to have more time to lesson plan, attend team meetings, and collaborate with the team (Merriam-Webster, 2016). Most participants described that they lacked time to collaborate with the team and to lesson plan. This lack of collaboration and lesson planning causes them to feel inadequately prepared to support the academic and social needs of ASD students. The research indicates that this lack of time makes teachers feel that teaching students with ASD is overwhelming and challenging, and like they are less successful teachers. One participant stated,

“I am not as successful meeting the academic needs of these students as I would be with more time for support.”

Previously conducted research has not discussed that teachers’ beliefs surrounding an increase in time commitment is due to the increased demand for team meetings and lesson planning. However, teachers could feel this way based on their lack of training and knowledge about ASD. Previous research discussed that a lack of training, resources, and preparedness causes major challenges for both the student and teacher (Horrocks, White, & Roberts, 2008). Sansosti and Sansosti (2012) found that more than half of the teachers teaching in inclusion classrooms feel that they need more training on the autism diagnosis. All participants within this research study stated that they lack the proper training to feel fully prepared for the incorporation of ASD students into their classroom and that they need more time to meet the academic and social needs of their students. Therefore, a participant’s lack of time could directly impact how a teacher views the academic success of their ASD students (See Figure 5.15). Overall, every participant in the study stated that they need more time in order to properly implement teaching strategies for ASD students so that they can feel fully prepared and knowledgeable in their work with ASD students.

*Figure 5.15: Lack of time and its impact on how teachers view academic capabilities*



## **Emergent Theme Two: Needed Resources**

Findings revealed that participants felt that they lacked many needed resources in order to best meet the academic and social needs of ASD students. Needed resources are defined as identified needs desired by educators so they can best meet the needs of their students (Merriam-

Webster, 2016). Most participants discussed feeling inadequately prepared to meet the academic and social needs of ASD students. The data suggest that participants feel they lack the proper preparation and training needed to effectively teach ASD students. Needed resources sub-themes used to address research question two were 1) training, 2) collaboration, 3) schedule accommodation, and 4) support. These findings revealed that participants feel that they need more training and support in order to best meet the needs of ASD students in their classroom.

***Sub-theme one: Training.*** Participants identified training as a sub-theme as a needed resource in order to best meet the academic and social needs of ASD students. Training is defined as a teacher's need for more professional development workshops and continuing education about ASD (Merriam-Webster, 2016). All participants felt as if they have not received adequate training to properly meet the academic and social needs of ASD students.

Participants identified lack of training as a major influence that impacts their ability to properly and effectively meet the academic and social needs of ASD students. Participants stated that using a responsive classroom model yielded the "Most success with meeting the social needs of ASD students." However, it also noted that participants feel they "Have not received nearly enough training around how to properly implement its strategies." Horrocks, White, & Roberts (2008) found that lack of training and knowledge identified by teachers is the largest challenge they face and is the main source of resistance for many educators surrounding inclusion classrooms. The data revealed that participants believe that they are not fully prepared for the incorporation of ASD students into their classrooms and that they need more training. The findings from this study align with previously conducted research. Sansosti and Sansosti (2012) also found that more than half of the teachers teaching in inclusion classrooms feel that they need more training on the autism diagnosis.

This study revealed that teachers feel inadequately prepared and/or trained on how to best meet the social, educational, and behavioral needs of ASD students. This lack of training, resources, and preparedness causes major challenges for both the student and teacher. For inclusion classes to be successful, regular education teachers and students must understand how to academically and emotionally support and care for students with autism (Crosland & Dunlop, 2012; Busby, et al., 2012). This lack of training could be a major factor contributing towards participants feeling overwhelmed and that ASD students are challenging to work with (See Figure 5.16). Lack of training could also be a contributing factor toward participants' feelings that ASD students are challenging to work with since they lack the skills and knowledge to best support their lower academic, social, and emotional capabilities.

*Figure 5.16: Training and its impact on how teachers view academic capabilities*

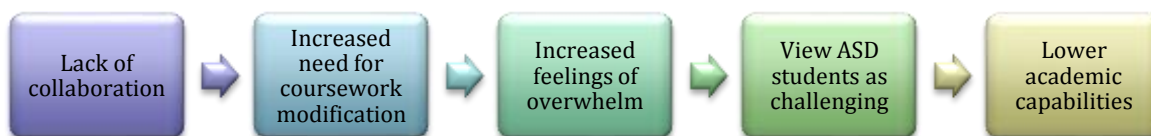


***Sub-theme two: Collaboration.*** Participants identified collaboration as a sub-theme as a needed resource in order to best meet the academic and social needs of ASD students. Collaboration is defined as a teacher's desire to have all individuals working with an ASD student work together towards the student's goals (Merriam-Webster, 2016). Participants stated the need for a collaborative approach in working with ASD students. Participants identified that challenges occur when a collaborative approach in working with ASD students is not utilized. One participant stated that in order to feel successful she needed, "A team approach - working cooperatively and collaboratively with special education teachers, the speech and language

teacher, the ABA person, the behaviorist when necessary.” Participants stated that they needed useful and appropriate supports in place that included other service providers such as occupational therapists, speech therapists, physical therapists, reading specialists, and writing specialists.

According to previous research, teachers who identified a positive school culture proved to have the most significant impact on students with ASD in an inclusion setting (Crosland & Dunlap, 2012). The data also suggest that most participants believe they need assistance from support staff in the creation and modification of coursework. Participants stated that, “Having support from specialists within the school and in particular within the classroom assisted in making these social interactions the most successful.” Previous research by Crosland and Dunlop (2012) determined that having a supportive school leader creates positive organizational environments, funding for resources, training, data-based decision making, and team decision making. Overall, participants believe that it is important to have useful and appropriate supports in place for ASD students in order to best meet the student’s lower level academic and social needs. Lack of training could be a contributing factor toward participants’ feelings that they need a collaborative approach when working with ASD students since they lack the skills and knowledge to best support their lower academic, social, and emotional capabilities (See Figure 5.17).

*Figure 5.17: Collaboration and its impact on how teachers view ASD students’ academic capabilities*



***Sub-theme three: Schedule accommodations.*** Participants identified schedule accommodations as a sub-theme as a needed resource in order to best meet the academic and

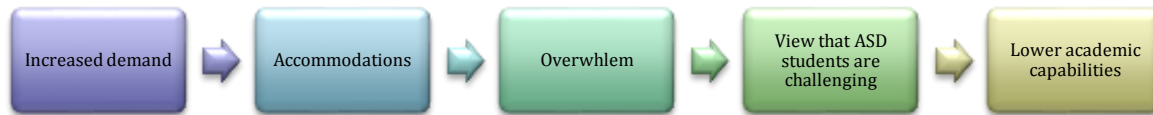
social needs of ASD students. Schedule accommodations is defined as a teacher's desire to have a shift in their schedule to ensure that they have an increase in their allotted time for lesson planning, team meetings, and team collaboration each week (Merriam-Webster, 2016).

Participants identified that challenges occur when support from the school administration is not provided to the teacher or student. Participants felt they need their schedule to change when they have a student with ASD enrolled within their classroom. One participant stated the need for "more planning time." Participants identified needing an accommodation in their schedule to assist them with the increased demands placed on them.

According to previous research, teachers who identified a positive school culture proved to have the most significant impact on students with ASD in an inclusion setting (Crosland & Dunlap, 2012). The data also suggest that most participants believe that it is important for teachers to have a shift in their schedule. The data suggest that participants believe that this schedule shift would ensure that they have an increase in their allotted time for lesson planning, team meetings, and team collaboration each week. Participants discussed that their lack of time for lesson planning and team meetings allotted within their schedule make them feel overwhelmed since it is "a challenge to meet their needs without taking away attention or instructional time from the general education students." The findings from this study aligns with previously conducted research by Harrocks, White, & Roberts (2008), which determined that in order for inclusion to be successful, teachers must understand autism and be prepared to respond to the behavioral manifestations of the disorder while meeting the complex social and academic needs of the students (See Figure 5.18).

*Figure 5.18: Schedule accommodations and its impact on how teachers view academic capabilities*

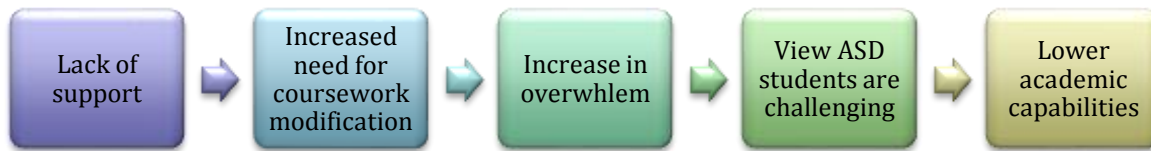




***Sub-theme four: Support.*** Participants identified support as a sub-theme as a needed resource in order to best meet the academic and social needs of ASD students. Support is defined as a teacher’s desire to have school administration help them with their work with ASD students (Merriam-Webster, 2016). Participants identified that challenges occur when support from the school administration is not provided to the teacher or student. Several participants believed that they would feel more successful and confident in their work with ASD students with more support from administrators. One participant stated that they need “administrators that actually know "who" our ASD students are.” The data revealed that participants believe that it is important that teachers have school administration help them with their work with ASD students.

According to previous research, teachers who identified a positive school culture proved to have the most significant impact on students with ASD in an inclusion setting (Crosland & Dunlap, 2012). The data also suggest that most participants believe they need assistance from support staff in the creation and modification of coursework. Participants stated that, “Having support from specialists within the school and in particular within the classroom assisted in making these social interactions the most successful.” Previous research by Crosland and Dunlop (2012) determined that having a supportive school leader creates positive organizational environments, funding for resources, training, data-based decision making, and team decision making. Overall, participants believe that it is important that teachers have school administration help them with their work with ASD students due to the students’ decrease in functioning and academic capabilities (See Figure 5.19).

*Figure 5.19: Support and its impact on how teachers view academic capabilities*



**Question three: How does a teacher's perception towards a student's diagnosis impact teaching strategies?**

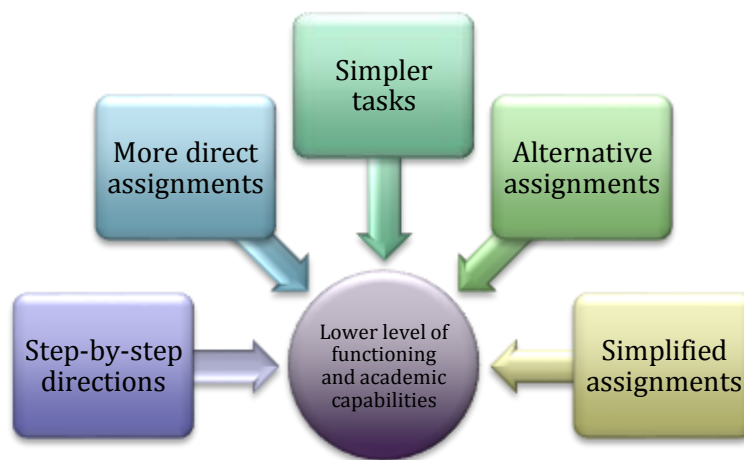
The emergent theme 1) accommodations was used to address research question three, how does a teacher's perception towards a student's diagnosis impact teaching strategies. One sub-theme was used in order to best address research question three. The accommodations sub-themes used to address research question three was 1) workload modifications changes, 2) organizational skills, and 3) classroom arrangement. These findings revealed that participants shift their teaching strategies based on a student's diagnosis in order to best meet the needs of ASD students in their classroom.

**Emergent Theme One: Accommodations**

Findings revealed that participant responses demonstrated that teachers go above and beyond to meet the needs of ASD students despite feeling that they lack training, collaboration, and preparedness. Accommodations are defined as a teacher's ability to provide students with what they need in order to succeed socially and academically (Merriam-Webster, 2016). All participants reported making accommodations for ASD students, even though most participants discussed feeling inadequately prepared to meet the academic and social needs of ASD students. The data suggest that despite participants feeling that they lack the proper preparation and training needed to effectively teach ASD students, they regularly shift teaching strategies in an attempt to meet the academic needs of ASD students.

***Sub-theme one: Workload modifications.*** The data suggest that participants implement many modifications in their teaching and organizational strategies to best support ASD students. Workload modifications are defined as shifts in a lesson plan to meet the specific needs of a student (Merriam-Webster, 2016). Participants reported making this accommodation based on a student's lower level of functioning and academic capabilities. A shift in teaching strategies was implemented based on the idea that ASD students have a lower level of functioning and lower level of academic capabilities. Common ways identified by participants in how teachers would modify an ASD student's workload is by including "step-by-step directions," "assignments are more direct," "simpler tasks," and "use of alternative and/or simplified assignments." All participants reported workload modifications for ASD students in order to decrease students' frustrations while simultaneously working to meet their academic and social needs (See Figure 5.20).

*Figure 5.20: Teachers' perceptions of ASD students and its impact on lesson plans*



The data suggest that participants believe that it is important to shift in a lesson plan in order to meet the specific academic and social needs of a student. The study revealed that when participants modify the workload for an ASD student while creating and implementing lesson

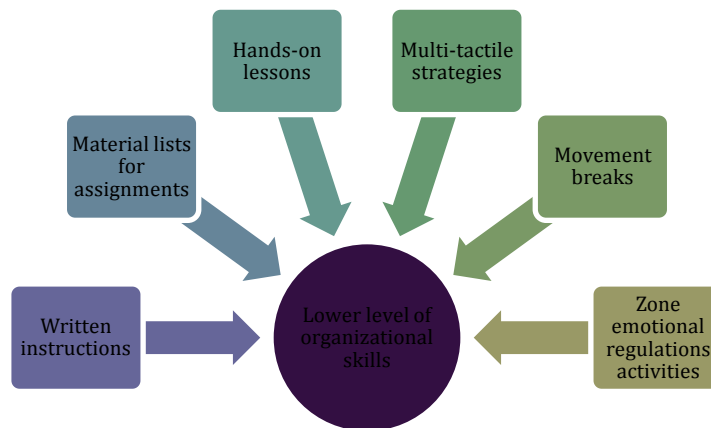
plans and teaching strategies, they are attempting to take into account a student's diagnosis, despite their lack of training. The findings from this study align with previously conducted research. Previous research has demonstrated that teachers believe that general education classrooms are beneficial by providing autistic students with a more rigorous, demanding, and grade-level educational experience (Chamberlin, Kasari, & Rotheram, 2003; Sansosti & Sansosti, 2012).

The data suggest that participants implement workload modifications for ASD students in order to decrease the students' frustration, which will in turn help to meet their decreased level of academic and social needs. Meeting these needs is imperative to their success. General education classrooms are also beneficial by providing autistic students with a more rigorous, demanding, and grade-level educational experience (Chamberlin, Kasari, & Rotheram, 2003; Sansosti & Sansosti, 2012). Participants identified workload modifications as the number one way they try to accommodate ASD students' social and academic needs.

***Sub-theme two: Organizational skills.*** The data suggest that participants implement modifications in their teaching strategies surrounding organizational skills as a way to accommodate ASD students' social and academic needs. Organizational skills are defined as a student's ability to access and organize classroom content (Merriam-Webster, 2016). Participants discussed the implementation of a variety of strategies in order to decrease student frustration in the classroom, while helping them to become more organized in their work. Many participants discussed the utilization of organization strategies that are more direct and focused as a way to increase the organization of ASD students. Some approaches participants discussed were through the use of written lists such as, "Provide written instructions" and "Provide student with a material lists for assignments." Participants also discussed some of the following teaching

strategies to help increase organizational skills while decrease student frustration and overwhelm by including “Hands-on lessons,” “Multi-tactile strategies,” “Movement breaks,” and “Zone emotional regulations activities” (See Figure 5.21).

*Figure 5.21: Teachers’ perceptions of ASD students’ organizational skills and their impact on lesson plans*



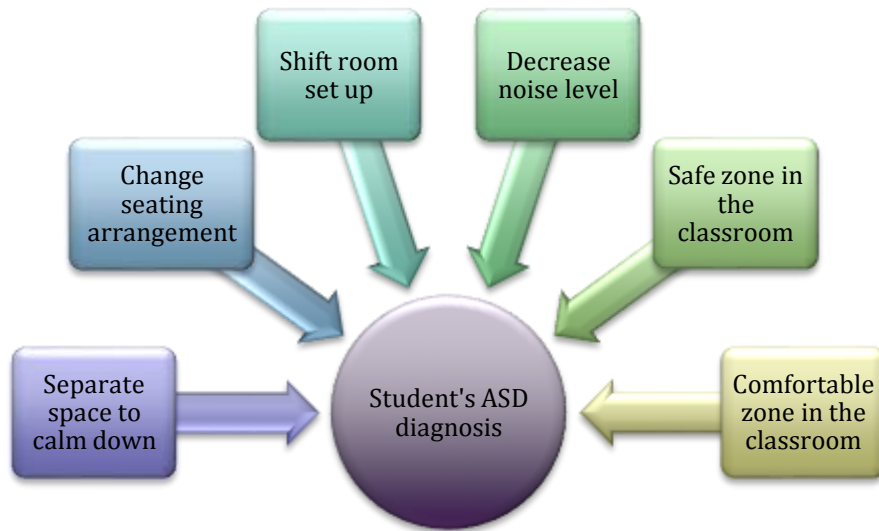
The data suggest that participants believe that it is important to shift in a lesson plan in order to meet the specific organizational needs of a student. The study revealed that when participants modify the workload for an ASD student when creating and implementing lesson plans and teaching strategies, they are attempting to take into account a student’s diagnosis, despite their lack of training. Previous research has demonstrated that teachers believe that general education classrooms are also beneficial by providing autistic students with a more rigorous, demanding, and grade-level educational experience (Chamberlin, Kasari, & Rotheram, 2003; Sansosti & Sansosti, 2012). Overall, the data suggest that participants implement many modifications in their teaching and organizational strategies to best support ASD students. The data suggest that participants implement workload modifications surrounding organizational skills for ASD students in order to decrease the students’ frustration, which will in turn help to meet their decreased level of academic and social needs. Meeting these needs is imperative to their success. General education classrooms are also beneficial by providing autistic students

with a more rigorous, demanding, and grade-level educational experience (Chamberlin, Kasari, & Rotheram, 2003; Sansosti & Sansosti, 2012). Participants identified organizational modifications as the number two way in which they try to accommodate ASD students' social and academic needs.

***Sub-theme three: Classroom arrangement.*** Participants identified their classroom arrangement as a sub-theme in the way they are accommodating to ASD students' social and academic needs. Classroom arrangement is defined as when a teacher changes the seating arrangement and classroom set-up in order to best meet the academic and social needs of the ASD student (Merriam-Webster, 2016).

The data suggest that participants believe that it is important to shift the classroom arrangement in order to meet the specific academic and social needs of a student. One participant stated taking into account the room set-up by creating "A space for the children to calm down if needed." The study revealed that participants took a student's ASD diagnosis into account while creating their lesson plans and classroom environment by modifying their classroom arrangement for ASD students. Participants stated that the noise level of the classroom was one of the largest challenges many ASD students face. Therefore, participants reported creating a safe and comfortable zone for students. The data suggest that participants believe that it is important for teachers to shift the seating arrangement and room set-up in order to best meet the academic and social needs of the ASD student. Meeting these needs is imperative to the student's academic and social success (See Figure 5.22).

*Figure 5.22: A student's ASD diagnosis and its impact on classroom arrangement*



Previously conducted research has demonstrated that teachers believe that general education classrooms are beneficial by providing autistic students with a more rigorous, demanding, and grade-level educational experience (Chamberlin, Kasari, & Rotheram, 2003; Sansosti & Sansosti, 2012). Previous research conducted by Harrocks, White, & Roberts (2008) determined that in order for inclusion to be successful, teachers must understand autism and be prepared to respond to the behavioral manifestations of the disorder while meeting the complex social and academic needs of the students. General education classrooms are also beneficial by providing autistic students with a more rigorous, demanding, and grade-level educational experience (Chamberlin, Kasari, & Rotheram, 2003; Sansosti & Sansosti, 2012). Participants identified shifting their classroom arrangement as part of their lesson plan modifications in order to accommodate ASD students' social and academic needs.

### **Study Limitations**

There were several limitations to the study due to the sample size and the study's geographical location. Limitations to the study included teachers' honesty while completing the questionnaire, small sample size, and the ability to generalize the findings to non-suburban

geographic locations. My personal bias and the interviewee bias were also limitations of the study.

My bias due to previous experiences, in particular my experiences with my son, who was diagnosed with high functioning ASD, were limitations to the study. According to Creswell (2012), a researcher can decrease bias within a study by being sensitive, respectful, and inclusive. In order to ensure that my potential personal bias did not interfere with the research study, I maintained professionalism throughout the course of the study. I made sure to use respectful, inclusive language, not exclude/offend anyone, and was sensitive to the teachers' responses by imagining what it would be like to be in their shoes.

Another potential impact on the study's findings was that three participants reported having a family member or someone they knew that has been diagnosed with autism, while eleven participants reported not having a family member or someone they knew that has been diagnosed with autism. The participants' relationships to the individual diagnosed with autism varied and were listed as a friend, aunt, and cousin. This relationship, or lack thereof, could have altered participants' feelings, knowledge, and understanding of ASD. This relationship also could have altered a participant's honesty while completing the survey. Another limitation was that there were only five schools that participated in this research study. Despite these limitations, this research study provides educators with pertinent information regarding teachers' perceptions of high functioning students with autism and whether or not their perceptions impact the students' learning environment.

## **Conclusion**

This research study examined and explored the role teachers' perceptions play in the learning environment. This study identified teachers' ideologies, feelings, and beliefs that



influence their attitudes towards autistic students. It also examined whether teachers perceived they were offered the proper training, support, and tools so they could provide students the best possible education. There are several findings that were a result of the analysis of the data and there are implications for schooling students with and without autism from teachers' perceptions of ASD and its impact on the learning environment.

Overall, teachers perceived students with ASD to positively impact their classroom environment. Participants stated that ASD students teach non-ASD students lessons that cannot be learned from a book. Despite these positive attributes, participants described feeling an overwhelming sense of frustration since there are many challenges that directly impact their view of ASD students. Participants felt that ASD students were challenging to work with due to their disruptive behaviors, outbursts, and lower level of functioning. These negative views caused the participant to feel that ASD students have a lower level of functioning, which impacts their academic performance. All participants shifted their teaching strategies in order to best meet ASD students' decrease in academic capabilities.

Teachers reported a lack of training and preparation on how to best meet the academic and social needs of ASD students, which negatively impact their feelings of success in their work with ASD students. Even though teachers reported having a lack of training, support, and team approach in their work with ASD students, all participants reported shifting their lesson plans to meet the academic needs of ASD students. The goal of these shifts in teaching strategies was to decrease frustration and increase the students' academic success.

### **Implications**

There were many implications derived from this study that may inform educators, students, parents, and school districts on how they can best support the academic and social

needs of students with autism. These implications demonstrate the need for continual progress in educators' work with ASD students. They help to identify ways in which public elementary schools can best meet the needs of inclusive classrooms for both ASD students and classroom teachers. Implications derived from the research on how educators, students, parents, and school districts can best support the academic and social needs of students with autism are:

- Help school districts recognize the best ways to best support their students and educators.
- Help educators understand the best ways to best support their ASD students' academic and social needs.
- Assist school districts in recognizing the value in the development and implementation of policy change concerning the quantity of teacher training about ASD.
- Demonstrate the need for school districts to ensure the proper professional development and training programs for teachers.
- Help parents/caregivers, educators, and school districts understand the importance of a collaborative approach when working with ASD students.
- Assist educational system leaders in the implementation of better systems for utilizing a team approach when working with autistic students.
- Help school districts and educators understand the importance of proper classroom placement for ASD students and support staff.
- Develop and implement policy change about teacher schedules when teaching a class with an ASD student in it, in order to ensure that a teacher has more time for lesson planning and team meetings.

## **Recommendations for Action**

The analysis of the sixteen-question survey completed by fourteen public elementary school teachers suggests the following recommendations for further action and the continual progress in educators' work with ASD students:

1. Shift how schools implement teacher training on working with autistic students prior to teaching in an inclusion classroom. There is a current need to increase teacher training about autism. This district/state shift would ensure that educators that are teaching in an inclusion classroom are receiving regular training, including the most up-to-date resources and information. This increase in training will benefit teachers, parents, and students by ensuring that teachers are educated on the best ways to meet the academic and social needs of ASD students.
2. Ensure a team approach within school systems. School districts should create policy change to ensure that a collaborative/team approach occurs with all individuals working with autistic students within the school. Implementing these changes would ensure that the school is utilizing a team approach in working with autistic students, which would benefit the teacher, team, and student. School districts should implement better scheduling practice in order to ensure that this level of collaboration is occurring weekly by including this time in the inclusion classroom teachers' schedules.
3. School policy about teachers' schedules when they have an ASD student enrolled in their class should change. Teachers reported needing more time to collaborate with the team and to alter lesson plans to meet the academic capabilities of autistic students. In order to fully utilize a team approach, it is imperative that

teachers' schedules allot enough time throughout the week to collaborate with the team and alter lessons plans in order to accommodate the needs of ASD students.

This schedule change would ensure that teachers have time in their day to change lesson plans and collaborate with the team, which will help them to best meet the academic needs of their students.

4. Revise placement protocols to ensure that all students are receiving proper support and classroom placement.
5. Teachers should be financially compensated for the increased workload that comes with having a student with ASD in their classroom. Teachers with ASD students report needing to spend more time on preparing their lesson plans than those without ASD students. Teachers should receive a stipend or increase in pay to reflect this increase in work, depending on budget and caseload.

### **Recommendations for Further Study**

The analysis of the sixteen-question survey completed by fourteen public elementary school teachers suggests the following recommendations for further study:

1. Examine a larger and more diverse sample size including urban, suburban, and rural schools.
2. Examine the effectiveness of teacher training and professional development programs on autism.
3. Since this research study included only female elementary school teachers, further research about male teachers' perceptions of autistic students and its impact on academic outcomes would help gain further insight into how to best meet ASD students' academic and social needs.

4. Explore specific types of trainings teachers believe would best support them in meeting the academic and social needs of ASD students.

### **Conclusion**

The purpose of this qualitative research study was to examine, explore, and describe teachers' perceptions towards high functioning autistic students and its impact on students' learning environment in suburban elementary school inclusion classrooms. Participants shared their feelings about their work with ASD students. Common themes that emerged were 1) enriching experiences, 2) preparedness and knowledge, 3) classroom challenges, 4) accommodations, and 5) needed resources. This research study provided participants and their respective school districts with valuable information to help ensure that they are properly meeting the academic and social needs of autistic students.

Overall, this research study revealed that teachers perceived students with ASD to positively impact their classroom environment. Despite these positive attributes, participants described feeling an overwhelming sense of frustration since there are many challenges that directly impact their view of ASD students. Participants felt that ASD students are challenging to work with due to their disruptive behaviors, outbursts, and lower level of functioning. These negative views on lower level functioning impact students' academic capabilities. All participants reported shifting their teaching strategies and lesson plans in order to best meet the ASD students' decrease in academic capabilities.

Teachers reported a lack of training and feeling underprepared to best meet the academic and social needs of ASD students. This lack of training and preparedness impacted their feelings of success in their work with ASD students. Even though teachers reported having a lack of training, support, and team approach surrounding their work with ASD students, all participants

reported shifting their lesson plans to meet the needs of ASD students' academic needs. The goals of these shifts in teaching strategies were to decrease frustration and increase the academic success of the students.

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## **Appendix A: RECRUITMENT E-MAIL**

Dear teachers,

You have been invited to partake in a research study. The researcher, Corleigh Donati, is a doctoral student in the Educational Leadership program at the University of New England. The purpose of this research study is to explore teachers' perceptions of students with autism and their impact on academic outcomes. I know that time is valuable and it is almost the start of your summer vacations, but this survey should not take too long to complete. The survey is completely anonymous and confidential and should not take more than 5-10 minutes to complete.

The survey will be open until (survey due date entered here). Please click on the link below to start the survey: (Link to survey here)

Please feel free to contact the research if you have any questions. Thank you so much for your time.

Sincerely,

(name of school contact)

## **Appendix B: INFORMED CONSENT**

Dear potential participant,

You have been invited to partake in a research study. The researcher, Corleigh Donati, is a doctoral student at the University of New England. The purpose of this research study is to explore teacher's perceptions of students with autism and its impact on academic outcomes. About 16-32 educators will participate in this study. Data will be anonymous and will be collected via the Internet.

The following information is to help you decide whether or not you want to participate in this research study.

- Your participation in the research study is voluntary. You have the right to decide if you would like to participate in this research study.
- You can choose to voluntarily withdraw from the study at anytime without penalty.
- If you choose to not participate in the study or withdraw from the study no one with in your school will be notified.
- Participation in this study involves completing an online questionnaire. The survey will take about 20 to 30 minutes to complete.
- The researcher will not identify my school or me by name. All reports using information obtained from the survey will remain completely anonymous and confidential.
- Data for this research study will be in a secure location in an encrypted to maintain confidentiality of participants.

- This research study has been reviewed and approved by the Institutional Review Board (IRB) at the University of New England.

By electronically initialing this form I am agreeing I have read and understand the explanation of this study provided to me, that all my questions have been answered to my satisfaction, and that I voluntarily agreed to participate in this study.

If you have any questions about the study and/or this form please do not hesitate to contact me.

## **Appendix C: OPEN ENDED QUESTIONNAIRE**

### Demographic information

1. What is your educational role within the school? (Please check only one)

\_\_\_\_ General education head/lead teacher

\_\_\_\_ Teacher aid

\_\_\_\_ Special education teacher

\_\_\_\_ Other (specify) \_\_\_\_\_

If the participant answers anything other than general education head/lead teacher then they will be directed to the “stops” page that states “thank you for taking the time to start this survey, however, you are not eligible to complete the survey”. The “stops” page will then conclude the survey instrument.

2. Which grade level do you teach?

\_\_\_\_ first grade

\_\_\_\_ second grade

\_\_\_\_ third grade

\_\_\_\_ fourth grade

3. Please indicate your age by checking one of the following:

\_\_\_\_ 20 to 35 years

\_\_\_\_ 36 to 45 years

\_\_\_\_ 46 to 55 years

\_\_\_\_ 56 years or more

4. What is your gender?

\_\_\_\_ Male

\_\_\_\_Female

5. How long have you been an educator?

\_\_\_\_Less than one year

\_\_\_\_1 year to 2 years

\_\_\_\_2 to 5 years

\_\_\_\_5 to 10 years

\_\_\_\_More than 10 years

If the participant answers less than 2 years then they will be directed to the “stops” page that states “thank you for taking the time to start this survey, however, you are not eligible to complete the survey”. The “stops” page will then conclude the survey instrument.

6. What educational degrees do you have?

7. Do you have a family member or someone close to you that has autism?

\_\_\_\_yes

If yes is checked, what is your relationship to the person?\_\_\_\_\_

\_\_\_\_no

8. Which Applies to you? (Please check one)

\_\_\_\_I have attended one in-service training workshop, in the past, aimed at teaching educators more about autism. The workshop was in the year \_\_\_\_\_.

\_\_\_\_ I have attended more than one in-service training workshop in the past, aimed at teaching educators more about autism. The last three workshops where in years:

1. \_\_\_\_\_ 2. \_\_\_\_\_ 3. \_\_\_\_\_

\_\_\_\_I have not been to a workshop aimed at teaching educators more about autism and I do not have of any plans in the near future.

Open-ended Questions:

1. Have you taught with students with autism in a public education inclusion classroom within the past four years?

a. If yes, the participant will answer the following question.

i. please explain some details, i.e. how many students have you worked with, and how long ago was it.

a. If the participant answers no, they will be directed to the “stops” page that states “thank you for taking the time to start this survey, however, you are not eligible to complete the survey”.

The “stops” page will then conclude the survey instrument.

2. How do you feel it went?

3. How successful do you feel you were at teaching a student with autism?

4. How was it to have a student with autism in the classroom?

5. How well did the student get along with other students?

6. How did the student interact with other educators?

7. How successful were you in meeting the academic needs to the autistic student?

8. How successful were you at meeting the social needs to the autistic student?

9. What were some advantages to having a student with autism in your classroom?

10. What were some challenges to having a student with autism in your classroom?

11. Did you take the student’s diagnosis into account when developing lessons plans and teaching strategies?

a. If yes, the participant will answer the following question.

i. In what ways did you take the student’s diagnosis into account?

ii. How did the student’s diagnosis influence your lesson plans/teaching strategies?



b. If no, the participant will skip to question 12.

12. Did you implement specific teaching strategies to teach the student with autism in your classroom?

a. If yes, the participant will answer the following questions.

i. What teaching strategies did you implement?

ii. Why did you choose these teaching strategies?

iii. How did these teaching strategies go?

b. If no, the participant will skip to question 13.

13. Do you feel you had enough training surrounding the academic and social needs of students with autism? Why or why not?

14. What resources do you need as an educator to make teaching a student with autism more successful?

16. Are there things you wish you could have done differently in the past when teaching students with autism?

17. Overall, do you feel you were/are successful at helping the student(s) achieve academic success? Why or why not?

## **Appendix D: Researcher's Resume**

CORLEIGH DONATI, MSW, LICSW

### **EMPLOYMENT**

#### **Lemon Tree Counseling Center**

August 2008-Present

##### *Owner/Psychotherapist*

Provide short and long term psychotherapy services to individuals and groups, consultation, and supervision services. Facilitate workshop and training sessions. Maintain community relations. Responsible for billing, payables, and insurance audits.

#### **Endicott College Van Loan School of Graduate and Professional Studies**

May 2008- Present

##### *Adjunct Professor*

Responsible for developing course content, presenting up to date material, facilitating class discussions, and grading student's performance. Duties also include developing relationships with other staff and students. Provide classroom instructions at various United States Military Stations and Coast Guard Stations.

#### **Endicott College Undergraduate Program**

January 2007-Present

##### *Adjunct Professor*

Provide classroom instruction in various disciplines. Responsible for developing course content, presenting up to date material, facilitating class discussions, and grading student's performance. Duties also include developing relationships with other staff and students.

#### **Lesley University Undergraduate Program**

September 2012-December 2012

##### *Adjunct Professor*

Provide classroom instruction in various disciplines. Responsible for developing course content, presenting up to date material, facilitating class discussions, and grading student's performance. Duties also include developing relationships with other staff and students.

#### **North Shore Rape Crisis Center**

September 2004- June 2008

##### *Program Director*

Provide supervision to all staff, interns, volunteers, and 24-hour hotline. Fundraising development and implementation, grant writing, implementing policy change, and overseeing program budget. Duties also include short term individual and group counseling, medical and legal advocacy. Maintain and enhance relationships with community members and leaders. Facilitating community debriefings

#### **Salem State College Counseling Center**

September 2005-April 2006

##### *Counselor/Intern*

Provide short term individual and group counseling to undergraduate and graduate college students addressing various issues. Duties also include assisting in the development and facilitating educational workshops and presentations on campus.

#### **Victims of Crime and Loss Program**

September 2004-May 2005

##### *Counselor/Intern*

Provide individual and group counseling to survivors and family members of crime victims. Individual counseling with dual diagnosed adults and play therapy with children who witnessed domestic violence. Duties also include community debriefings and education outreach to local police departments.

**North Shore Rape Crisis Center**

June 2002-September 2004

*Assistant Program Director*

Supervision of staff, interns, and volunteers. Develop and coordinate education and outreach programs to community and professional groups of all ages. Implement community education and awareness programs. Duties include individual and group counseling, hotline supervisor, medical advocacy, and legal advocacy. Maintain and develop relationships with community members and leaders.

**Beverly High School**

January 2003- June 2003

*Drug and Alcohol Counselor Consultant*

Provided individual counseling and /or education to adolescents addressing issues of anger management, teen dating violence, and alcohol and substance abuse.

**Mass. Counseling Network**

September 2001-May 2003

*Education Consultant*

Provided and coordinated education, counseling, and outreach to community and professional groups on issues surrounding September 11, 2001.

**North Shore Rape Crisis Center**

September 2001-June 2002

*Educational Outreach Coordinator*

Provided and coordinated comprehensive education and outreach programs to community and professional groups of all ages. Provide supervision to interns and volunteers. Developed and maintained education and outreach curriculums. Maintain and sustain relationships with high school and college leaders. Duties included individual and group counseling, Hotline supervisor, medical advocacy, and legal advocacy.

**North Shore Rape Crisis Center***Community Outreach Advocate*

December 2000-September 2001

*Volunteer*

January 1998-December 2000

**EDUCATION AND LICENSING**

## University of New England

January 2014-Present

## Doctorate in Educational Leadership candidate

## Licensed Independent Clinical Social Worker

August 2008

License number 114716

## Masters in Social Work, Simmons College School of Social Work

May 2006

## Bachelor's Degree of Science, Boston University

May 2003

## Alpha Sigma Lambda National Honors Society

**TRAININGS AND CERTIFICATIONS**

- Dialectic Behavioral Therapy
- EMDR Level I and Level II certified
- Critical Incident Stress Management (CISM) certified
- Emotional Freedom Technique (EFT) Level I and Level II certified
- Massachusetts rape crisis counselor certified